Now Available *Online!*
http://www.devcatalog.apple.com

Apple Developer Catalog

Developer and Apple employee Joel Cannon used the Kaidan QuickPan Panoramic Tripod Head to create this virtual reality view of the Apple R&D campus in Cupertino, California. See page 7 for products that can help you do the same.

Ted Casey, Apple Employee and QuickTime VR's first photographer, used QuickTime VR to create this interactive panorama, "Avenue of the Americas" in New York City. See page 5 to learn how.

QuickTime VR is used extensively on the Web and in CD titles to bring interactive virtual reality experiences to Macintosh and Windows users. See QTVR products and accessories on pages 5-7.

The new industry standard in Mac-hosted development tools.

MACUSER EDITORS' CHOICE AWARD 1994 WINNER

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CodeWarrior®

Products

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  (All target platforms)
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  (Mac OS for 68K and PowerPC)
- CodeWarrior Bronze
  (Mac OS for 68K)
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  (Microsoft® Visual SourceSafe™ 4.0-compatible source code control system)
- Inside CodeWarrior
  (Printed version of Metrowerks on-line documentation)
- Inside PowerPlant™
  (Printed documentation for Metrowerks PowerPlant application framework)

See page 15 for product description and prices.

FOR MORE INFORMATION PLEASE CALL TOLL FREE: 1-800-282-2732

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With CodeWarrior's plug-in architecture, one Integrated Development Environment (IDE) hosts all compilers for all platforms. Whether you're developing in C, C++, or Pascal, CodeWarrior does it, with all three languages within one application. CodeWarrior supports:

PowerPC™:	Mac™OS, PowerTV™, Be™OS for BeBox™
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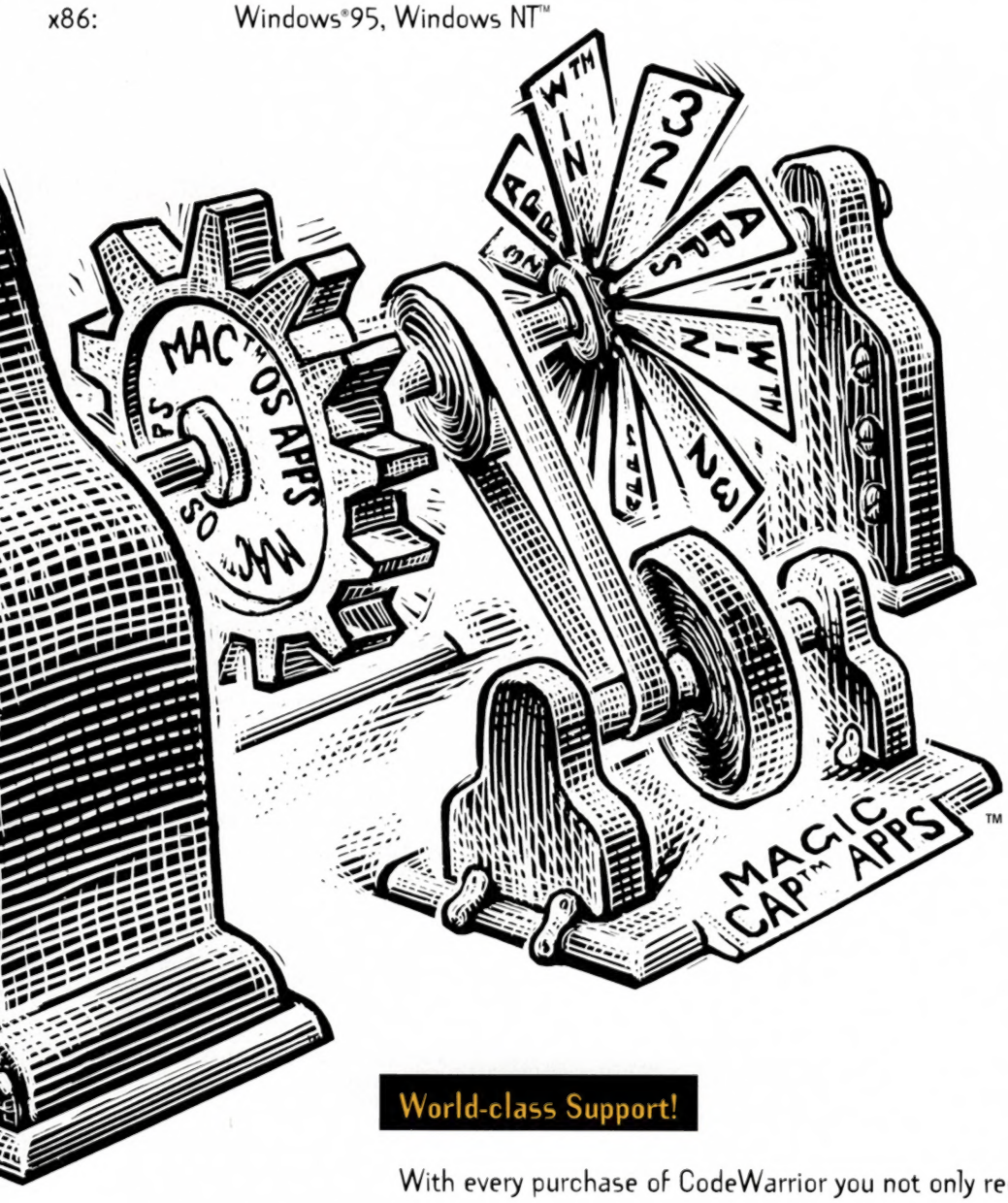

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metrowerks®

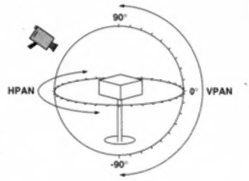
QuickTime VR Authoring Tools S

The authoring tool that can turn 68 million personal computers into virtua

Apple Computer, Inc.

What is QuickTime VR?

The award-winning QuickTime VR is revolutionary cross-platform software from Apple which enables Web page designers and professional developers to create exciting new multimedia products and Web pages incorporating QuickTime VR content. With QuickTime VR, users interactively navigate through 360° views of spaces, and explore three dimensional objects on Macintosh or Windows-based personal computers.



The QuickTime VR Authoring Tools require MPW Pro, and include several MPW templates.

MPW SOFTWARE

is now included, at no extra charge!

The QuickTime VR Authoring Tools Suite 1.0

The QuickTime VR Authoring Tools Suite is a set of Macintosh tools to create and link panoramas and objects from photographic, digital, video, or computer generated images.

Included is a complete set of documentation for planning, designing, photographing, and creating QuickTime VR panoramas and objects. The authoring tools also allow you to link objects to panoramas using clickable hot spots.

Included on the CDs are:

- A software tool (MPW-based) that stitches and blends adjacent images into a panoramic PICT file
- A software tool (MPW-based) that dices and compresses panoramic PICT files to less than 100 KB (low resolution) per panorama
- A scene editor (HyperCard-based) to create QuickTime VR scenes by adding and positioning nodes, hot spots, linking nodes together, and for linking QuickTime VR objects to scenes
- A variety of utility tools for formatting the data into the runtime software
- A video called *Photographing QuickTime VR*

Advantages for Developers

Performance

Due to a revolutionary distortion-correcting algorithm, QuickTime VR panoramas and objects maintain a normal perspective when the user moves the mouse. The speed of the algorithm allows up to 24-bit color images. Both vertical and horizontal panning can occur at fast speeds.

Accessibility/Cross Platform Playback

QuickTime VR runs on low-end Macintosh and Windows-based computers.

Small File Sizes

A high resolution 360° view of a panorama requires less than 540 KB.

Interactivity

QuickTime VR enables hot spots so any part of a 360° panorama can be active. A wide variety of actions can be triggered – "picking up" a QTVR object, playing a video or audio clip, displaying a photograph or text, or another QuickTime VR panorama.

Requirements

Power Macintosh, Macintosh or Mac OS-compatible computer with a 33 MHz 68040 or greater processor; FPU required for non-PowerPC processors; 40 MB RAM; 10 MB hard disk space; System 7.1 or later (System 7.1.2 required for PowerPC processors); MPW Pro (included), HyperCard 2.2 or later; QuickTime 2.0 or later; ResEdit 2.1.1 or later; CD-ROM drive; 832 x 624 resolution monitor; 16-bit video; thousands of colors required for the screen editor.

Minimum Macintosh system required for the runtime software playback

- QuickTime-capable Macintosh with a 25 MHz 68030 or greater processor and 8 MB RAM
- QuickTime 2.0
- System 7.1 or later
- Monitor with 8-bit video (16-bit preferred)
- Double-speed drive required for CD-ROM playback

Minimum Windows system required for the runtime software playback

- QuickTime 2.0 for Windows
- Windows 3.1
- MPC 2 configuration
  - 33 MHz 80386 processor
  - 8-bit video (16-bit video preferred)
  - 8 MB RAM
- Double-speed drive required for CD-ROM playback

QuickTime VR will support 8-, 16-, and 24-bit video.

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uite 1.0

eality theaters.

QuickTime® VR

Try This!

Create Your Own QuickTime Panorama

QuickTime VR makes it easy to create interactive panoramas with as few as eight photographs and a standard 35mm film camera. The number of photos per panorama varies according to the lens size used. The QuickTime VR Web site **(http://qtvr.quicktime.apple.com)** provides a technical paper and further explanation of the process. The key piece of equipment is a panoramic tripod head, like the Kaidan QuickPan system on page 7. The panoramic head makes it easy to capture photographs in 360° because it centers the nodal point of the camera lens as it is rotated. Careful image capture saves time later.

- Select a camera and a lens, and the appropriate QuickPan mount. Mount the camera to a standard tripod with the QuickPan system. You can use a standard 35 mm film camera, developing the film with the Kodak PhotoCD process, or a digital camera, such as the Apple QuickTake 100 or 150. Alternately, you could scan photos, slides, or transparencies to make PICT files. It's also possible to use video cameras, panoramic cameras, and computer-generated images from rendering software applications.
- Make sure the camera is level. This very important step is easily accomplished using the two levels built into the QuickPan mount. Keeping the camera level ensures faster post-production. Consistent lighting is also important.
- Choose the click-stop positions (the degrees between shots) based on the lens size. The QuickPan mount will automatically provide the recommended 30-50% overlap between each shot. Just shoot and rotate until you have photographed the entire scene.
- If you are using standard film, send the roll to a PhotoCD processor. If you are using a digital camera, simply download the images to your computer. (Rendered images, video, and panoramic camera images require other steps.)
- The individual images are blended into a single panorama with the QuickTime VR Authoring Tools. Specifically, an MPW template "stitches" them quickly and easily into a panorama. Once created, the file is viewed and manipulated (on both Macintosh and Windows computers) using the QuickTime VR Player (available from the QuickTime VR Web site—see below). QuickTime VR panoramas can be posted to a Web site, linked together, or used to author a title.

The QuickTime VR Web site, at **http://qtvr.quicktime.apple.com**, has useful information about QuickTime VR, including sample scenes and objects, a QuickTime VR technology paper, illustrations of how the technology works, developer information, and the QTVR Player to view QuickTime VR scenes on the World Wide Web.

TOP 5% WEB SITES POINT

AWARDS

March 1996

- Software Publishers Association, 1996 "Codies"; Excellence in Software Awards—Best Programming Tool

February 1996

- Byte Magazine 1995 Editor's Choice Awards, Award of Distinction for Breakthrough Technology
- Point Survey "Top 5% Best Sites of the Internet", Apple Computer and Asian Art Museum of San Francisco web site (http://sfasian.apple.com) See http://www.pointcom.com/

January 1996

- MacWorld 1996 World Class Award Finalist — Best New Technology
- Computer Graphics World, 1995 Editors' Choice Awards, First Place Winner of the CGW's Special Technology Award for Most Innovative Computer Graphics Product
- Seybold 1995 Editors' Choice Award for Excellence

May 1995

- MacUser 1994 "Eddy" Award for Breakthrough Technology of the Year
- CD-ROM Today's 1994 "ROMMIE" Award for Special Achievement

QuickTime VR Authoring Tools Suite 1.0

R0629Z/C (NTSC Version)	**$495.00**
R0637Z/C (PAL Version)	**$495.00**

Note

The required MPW software is now included in the QuickTime VR Authoring Tools Suite for no additional charge.

Photographing QuickTime VR Scenes Video

R0646LL/A (NTSC Version)	**$29.95**
R0645LL/A (PAL Version)	**$29.95**

APPLE HAS

WAIVED ROYALTIES

FOR DISTRIBUTING APPLICATIONS CREATED USING QUICKTIME VR!

A no-fee license agreement is still required before distributing the QuickTime VR run-time software as a player or in an application.

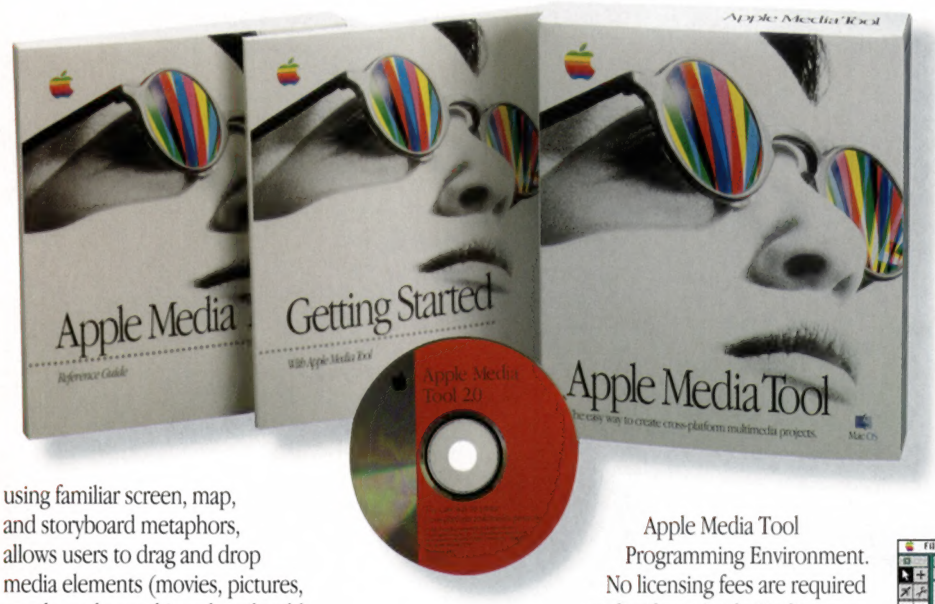
Apple Computer, Inc.

Apple Media Tool 2.0

NEW VERSION

Bring your interactive visions to life! With Apple Media Tool, you can easily create dynamic interactive multimedia projects for both Macintosh and Windows platforms. This object-based multimedia authoring software, using familiar screen, map, and storyboard metaphors, allows users to drag and drop media elements (movies, pictures, words, and sounds) and easily add interactivity without scripting. You don't have to be a programmer or even learn a scripting language to create interactive multimedia catalogs, support and training modules, music titles, on-line advertising, and networked kiosks.

The new 2.0 version is fully native on Apple Power Macintosh computers and incorporates many new features including support for QuickTime VR, custom color palettes, AppleScript, HyperText links, and more. Additional features may be customized into Apple Media Tool by its companion product, Apple Media Tool Programming Environment. No licensing fees are required to distribute Apple Media Tool presentations.



Requirements

Power Macintosh, Macintosh, or Mac OS-compatible computer with a 68030 or greater processor, 8MB RAM (12MB recommended); System 7.1 or later, QuickTime 2.1 (included); CD-ROM Drive.

Apple Media Tool 2.0

M3871Z/B **$495.00**

Apple Media Tool 2.0 (Upgrade from AMT 1.2)

M3955Z/B **$149.00**

SAVE

WITH OUR APPLE MEDIA TOOL AND MEDIA TOOL PROGRAMMING ENVIRONMENT BUNDLE.

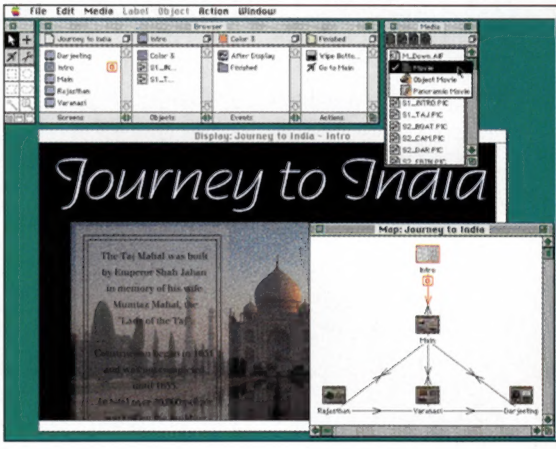
B1453Z/D

$1,195.00

UPGRADE BUNDLE FROM 1.2 TO 2.0

B2768Z/A

$295.00



Apple Computer, Inc.

Apple Media Tool Programming Environment 2.0

NEW VERSION

This object-oriented language and application framework allows programmers to customize features used within the Apple Media Tool authoring environment and add functionality to interactive projects created with Apple Media Tool. By tightly linking content creation with the programming process, development time can be dramatically reduced and you can give greater attention to content quality. The new 2.0 version includes an expanded Apple Media Language (AML) class library, incremental compiling and linking of AML code, improved and faster debugging facilities, Macintosh Programmers' Workshop (MPW), and enhanced, user-oriented documentation, written from an AMTPE developer's perspective.

NOW INCLUDES

required MPW software and documentation as well as QuickTime and QuickTime for Windows

Portable across 68K, Power Macintosh, and Windows platforms, the Programming Environment is easy to maintain and easily integrated with other languages such as C. Because the Programming Environment doesn't require the programmer to adapt to tools designed for content producers, the programming team has a virtually limitless range of options for customization and enhancements. No licensing fees are required to distribute Apple Media Tool presentations.

Requirements

Power Macintosh, Macintosh, or Mac OS-compatible computer with a 68030 or greater processor, 8MB RAM (12MB recommended); System 7.1 or later, QuickTime 2.1 (included); CD-ROM Drive.

Apple Media Tool Programming Environment 2.0

H0108Z/C **$995.00**

Apple Media Tool Programming Environment 2.0 (Upgrade from AMTPE 1.2)

M4068Z/B **$195.00**

Orders are shipped within 24 hours. **Order Toll-free Monday through Friday, 7am-5pm, PST.** U.S.: **1-800-282-2732**

Kaidan

QuickPan QuickTime VR Panoramic Tripod Heads

The Kaidan QuickPan Panoramic Tripod Head makes it easy to create QuickTime VR movies with 35mm cameras and the Apple QuickTake and Kodak DC40 digital cameras. QuickPan attaches to any standard photographic tripod and provides a precise, level, indexed swivel mount.

The QuickPan's modular design makes it easy to add and interchange components. You can purchase bundled systems or separate components.

The Apple QuickTake (QPA-1) and Kodak DC40 (QPK-1) mounting brackets provide an inexpensive solution that positions the nodal point of each camera in either landscape or portrait orientations. No adjustments are necessary.

The QuickPan Universal mounting bracket is designed for 35mm cameras and is adjustable from side-to-side and fore-to-aft, with two clamping levers. Indexed scales along both axes provide a clear indication of the nodal point (optical center) dimensions in both directions. With these two features, you'll be able to easily locate your camera's nodal point. The QuickPan Universal comes with two precision leveling indicators. The first, located on the base, is used to level the rotational plane of the pan head. This is particularly important for QuickTime VR photography as a tilted rotational plane causes the resulting movie to oscillate during playback. The other level attaches to your camera's flash shoe and is used to level the elevation of the camera. A third clamp lever is used to secure the camera to the upright mounting bracket.

All QuickPan models utilize adjustable angular click-stop positions that save time and minimize the chance of errors when compared to conventional photographic pan heads adapted for QuickTime VR photography. You simply shoot and rotate the camera to the next click-stop position. This will allow you to choose from a variety of cameras and lenses, while still maintaining and controlling the necessary image overlap needed for QuickTime VR photography.

There is also an angular readout and a rotation locking mechanism so that you'll be able to index and lock the head to any desired angular position. The Apple QuickTake and the Kodak DC40 cameras will also fit on the QuickPan Universal Bracket (the DC40 requires an additional spacer (QPS-1)). However, the Apple and Kodak brackets are smaller, lighter, support landscape orientation, and provide the ability to switch between cameras without removing them from their brackets.

QuickPan Universal with Tilt Option for 35mm Cameras

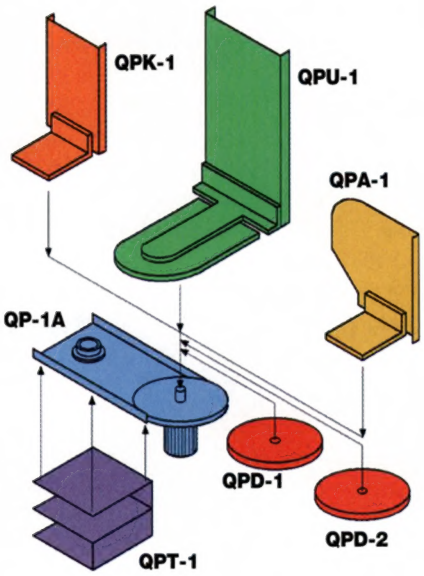
QuickPan with Tilt Option for the Apple QuickTake

Two interchangeable Detent Wheels are available, providing a wide range of angular increments that cover various camera and lens combinations.

The adjustable Tilt Head (QPT-1) conveniently attaches to the bottom of any QuickPan, providing an easy way to adjust the QuickPan for perfect level. Since tripods have only three legs, it's difficult and frustrating to level them along two axes. With the Adjustable Tilt Head, leveling is accomplished by adjusting the two convenient thumbwheels with your thumb and index finger, while observing the main leveling indicator. The QPT-1 is ideal for those photographers who don't own, or want to purchase, expensive tripods or tilt/pan units. Using the QPT-1 is so convenient and quick that it's a desirable option even for those who already own a tripod with a tilt capability.

Features

- Create QuickTime VR movies
- Angular quick-click positions
- Adjusts to locate nodal point
- Works with any tripod
- Precision leveling indicators
- Convenient tilt mount option
- Lightweight & rugged design
- Interchangeable brackets for:
  - 35mm Cameras
  - Apple QuickTake
  - Kodak DC40



QuickPan Systems (Components available separately)

T1760Z/A	QP-1	QuickPan for the Apple QuickTake 100 & 150	**$199.95**
T1854Z/A	QP-1T	QuickPan w/Tilt Option for the Apple QuickTake	**$279.95**
T1855Z/A	QP-2	QuickPan for the Kodak DC40 Digital Camera	**$199.95**
T1856Z/A	QP-2T	QuickPan w/Tilt Option for the Kodak DC40	**$279.95**
T1858Z/A	QP-3	QuickPan Universal for 35mm Cameras	**$299.95**
T1857Z/A	QP-3T	QuickPan Universal w/Tilt Option for 35mm Cameras	**$389.95**

QuickPan Components

				Systems listed above consist of these components					
				QP-1	QP-1T	QP-2	QP-2T	QP-3	QP-3T
T1846Z/A	QP-1A	QuickPan Panoramic Base	**$149.95**	✓	✓	✓	✓	✓	✓
T1850Z/A	QPU-1	QuickPan Universal Bracket	**$179.95**					✓	✓
T1848Z/A	QPA-1	Apple QuickTake Bracket	**$69.95**	✓	✓				
T1849Z/A	QPK-1	Kodak DC40 Bracket	**$69.95**			✓	✓		
T1847Z/A	QPT-1	QuickPan Tilt Head	**$89.95**		✓		✓		✓
T1851Z/A	QPD-1	Detent - 8,12,14,16,18 Position	**$34.95**	✓	✓				
T1852Z/A	QPD-2	Detent - 10,15,20,24,36 Position	**$34.95**			✓	✓	✓	✓
T1903Z/A	QPS-1	Kodak DC40 Spacer	**$18.95**	*(For use with Kodak DC40 when used w/Universal Bracket)*					

Apple Computer, Inc.

QuickTime Developer's Kit 2.0

Included in DEVELOPER MAILING

Now you can give your Macintosh and Windows applications real-life motion and sound. Macintosh environment features:

- QuickTime 2.0 Extension, QuickTime Power Macintosh Extension, and QuickTime Musical Instruments extension
- Utilities like MoviePlayer 2.0, 16-bit Audio Compression and more
- Sample content such as MPEG Movies, Music Movies, Time-Code Movies, and 60 field per second movies
- New sample code and headers

Includes software-only playback features such as faster 2x playback mode for current compressors, Apple Cinepak compressor, 1-bit fast dithering, network tuning, load-into-RAM option, and Photo CD support.

Macintosh-based Requirements

Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 2 MB RAM (4 MB RAM recommended for System 7); 40 MB hard disk space; System 6.0.7 or later; and a CD-ROM drive.

Windows-based Requirements

IBM or IBM-compatible computer with 386SX or greater processor; 4 MB RAM; 40 MB hard disk space; a CD-ROM drive; VGA or better graphics card; sound card; Windows 3.1; and DOS 5.0.

Special User Notes

Virtual memory may cause movies to play improperly. The Windows-based product is implemented as a set of Windows Dynamic Linked Libraries (DLLs). QuickTime uses the same API, movie files, decompressors, and human interface as are supported on the Macintosh and also supports Windows MCI (Media Control Interface) and OLE (Object Linking & Embedding), Visual BASIC, and Visual C++, and includes a Macintosh/Windows hybrid CD-ROM.

Licensing Note

Call Apple Software Licensing at 1-512-919-2645 for licensing details.

R0147LL/D **$99.00**

Allegiant Technologies, Inc.

Accelerated for Power Macintosh

SuperCard 2.5 Multimedia MegaStudio CD-ROM

SuperCard 2.5 is the fastest, most powerful authoring tool for assembling and delivering world-class multimedia content and custom interactive applications. Save money and get a complete multimedia production bundle all on one CD-ROM! CD includes: SuperCard 2.5 (Authoring); Avid VideoShop 3.0 (Video Editing); Specular LogoMotion (3D and Animation); Opcode AudioShop 2.1 (Sound Editing); Gryphon Morph 2.5 (Special Effects); and Specular TextureShape (Content). SuperCard offers direct script control over all objects: paint and draw graphics, menus, windows, sounds, QuickTime movies, even Director animations. Automatically converts Hypercard stacks to SuperCard projects. Use for computer-based training and simulations, interactive and multimedia presentations, educational research, and applications development.

Requirements

Macintosh or Mac OS-compatible computer with 68020 or greater processor; 2 MB RAM for black and white applications; 4 MB RAM for color applications; 10 MB hard disk space; System 7.0 or later (7.1 or later required for text-to-speech; QuickTime 2.0 or later required for movies).

T1815Z/A REDUCED PRICE! **$399.00**

The University of Texas

iTOWER Developer's CD 1.2: The Multimedia Kiosk Tool Kit

The iTOWER Developer's CD is the product of a collaborative effort between The University of Texas at Austin and Apple Computer to develop interactive multimedia kiosks providing a variety of enterprise-wide information services from networked sources. This CD contains the tools you need to produce kiosks and other multimedia applications which deliver interactive services from networked sources ranging from Internet servers to mainframe business computers. It includes all of the project's technical documentation, design guidelines, HyperCard authoring tools, network communications software, graphics design tools, QuickTime 2.0 movie production tools, equipment specifications, vendor lists, and registration information for the National Kiosk Developers' Workshops.

The CD provides a full working version of the iTOWER software.

Features

- Interactive map workbench that quickly enables creation of advanced interactive color maps of cities, campuses, buildings, or other facilities
- Full color dialog boxes and touch screen keyboards
- Security software to create fully protected public access HyperCard applications
- Standard routines to process common functions such as user navigation, help, audio controls, screen savers, movies, etc.
- Tools for creating over-sized color messages
- Graphics templates and instructions
- QuickTime production guide, including QuickTime 2.0

Requirements

Macintosh or Mac OS-compatible computer with a 68040 or greater processor; 12 MB RAM; System 7 or later; 300 kbps CD-ROM Drive; 13" color monitor.

Notes

Authoring tools use HyperCard which is sold separately. Graphics tools use Adobe Photoshop which is sold separately.

T1615LL/A **$195.00**

Elektroson, Inc.

GEAR Multi-OS CD-R Mastering Software

GEAR is the professional mastering software for cross-platform CD-ROM development and data storage applications.

Enhance the Power of Your CD Recorder

GEAR Desktop Multi-OS CD-R software is the most comprehensive CD recording software package for professionals that utilize CD-R in title development, premaster testing, audio applications, prepress storage, and mission critical archiving.

GEAR generates all major industry formats, including Shared Hybrid, HFS, and ISO-9660 for unmatched cross platform CD-ROM development. Support for every major CD recorder model, including new versions from Sony, Philips, Yamaha, HP, and Pinnacle Micro, makes GEAR an excellent upgrade to your CD recorder configuration.

Flexibility... 100% Data Integrity

GEAR Desktop Multi-OS provides the fastest virtual formatting speeds and support up to ISO Level 3, giving you the flexibility to keep native Mac file names up to 31 characters and resource fork descriptors in tact under ISO 9660—the industry standard CD format for cross platform compatibility.

Features such as post gap writing on all recorders, universal multi-session and disc-at-once recording, full error code handling and device testing, and full verification of the formatted data earn GEAR the highest marks in flexibility and data integrity.

Most Extensive Multimedia Format Support

GEAR allows you to master virtually any CD-ROM format. Formatting engines include Shared Hybrid, DA, XA, XA Interleaving, Enhanced CD, and mixed mode. In addition, users have the ability to master any professional multimedia authored file such as MPEG, CD-I, Video CD, and other major game formats.

In addition to detailed volume descriptor editing, the advanced user-defined disk properties can be edited to cut virtually any multimedia CD format. GEAR is continually adding new CD formatting engines and advanced feature sets.

For the Professional Title Developer

For professional developers who require absolute data integrity before mastering, GEAR is the only product to support DDP Premaster output (a sector

level description and layout of your authored title), the preferred method to generate a glass master.

Cross Platform OS, Multi-Language Support

GEAR Desktop includes versions for Macintosh, Windows 95, NT, and 3.1, and OS/2 WARP, giving professional developers the ability to master and archive data on all major operating systems. GEAR is delivered on CD-ROM, with localized versions and documentation in English, French, and German languages.

Features

- CD Formats Supported
  ISO 9660 (up to 37 characters); HFS Partitions; Shared Hybrid (ISO/HFS); XA, XA Interleaving; CD-I, Video CD files; Digital Audio & Mixmode; Enhanced CD (CD+); Multi-session; Game Titles; Custom Image Mastering; DDP, ANSI X3.27-1987 Output
- Disc-at-once, Track-at-once
- Drivers for virtually all CD recorders
- Multi-platter jukebox and transporter support
- Macintosh Specific (v. 3.0)
  Native Power Macintosh; SCSI Manager 4.3 compatible; AppleGuide support
- Additional Operating Systems (v. 3.2)
  Windows 95; Windows NT; Windows 3.1; OS/2 Warp
- Localized Software and Online Documentation in English, French, and German

Requirements

Macintosh: Macintosh or Mac OS-compatible computer with a 68040 or greater processor; 8 MB RAM; 2 MB hard disk space; System 7 or later; CD-Recorder or tape unit; available SCSI ID for CD-Recorder or Tape Device; 12 millisecond or less HDD (non-thermal recalibration) for Image Management.

Windows 95, NT, 3.1: IBM or IBM-compatible computer with a 80486 or greater processor; 8 MB RAM; 2 MB hard disk space; MS Windows version 95, NT, or 3.1; Busmaster SCSI Adaptor; 12 millisecond or less HDD (non-thermal recalibration) for Image Management.

OS/2 Warp: IBM or IBM-compatible computer with a 80486 or greater processor; 8 MB RAM; 2 MB hard disk space; OS/2 Warp version 3.x; Busmaster SCSI Adaptor; 12 millisecond or less HDD (non-thermal recalibration) for Image Management.

Note

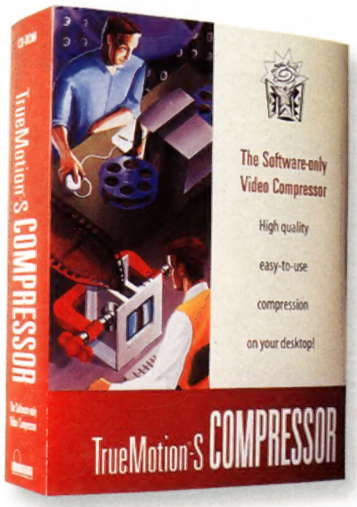
CD recorder and CD-R jukeboxes are not supplied.

T1827Z/A **$399.00**

Horizons Technology, Inc.

TrueMotion-S

TrueMotion-S Video is a software-only video compression and decompression addition module which provides video editing programs such as Adobe Premiere, Ulead Systems MediaStudio Pro, and Avid's VideoShop with the option of TM-S compression. TM-S gives excellent playback performance at 2x, 4x, or higher CD-ROM rates without the need for special decoder silicon on custom boards. Multimedia professionals and CD-ROM developers will appreciate TM-S as a versatile addition to their development tool kit.



TrueMotion-S is based on an intraframe compression scheme which individually compresses each frame of video. Competing systems utilize a complex strategy of inter-frame compression, which looks at data that has changed between frames. With TrueMotion-S, since every frame is a key frame and compressed individually, the developer has complete interactive editing powers and can quickly move forward or backward. It is therefore possible to easily access any video frame, play in reverse or forward, and use trick play features such as zoom. The developer can produce full-screen (640 x 480 pixels) by doubling the size of the video while retaining a very high quality appearance on screen.

Requirements

Compressor: Macintosh or Mac OS-compatible computer with a 68040 or greater processor; 16 MB RAM; 254 K hard disk space; System 7 or later; A/V input via Apple internal or Radius VideoVision Studio 2.0 card; A/V-capable display architecture; RAID or AV drive capable of 4 MB/sec sustained transfer rate.

Decompressor: Macintosh or Mac OS-compatible computer with a 68040 or greater processor; 4 MB RAM; 64 K hard disk space; System 7 or later; color display set for 16-bit display; QuickTime 2.0.

Note

Product available through catalog to U.S. customers only. Customers located outside the U.S. should contact the manufacturer for resellers in their area.

T1908LL/A *(U.S. only)* **$995.00**

Apple Computer, Inc.

Apple Multimedia Information Mailing

This subscription provides the latest essential multimedia marketing and technical information. With it, you'll receive a starter kit that includes the *Entering a New Dimension: Macintosh 3D Graphics* videotape; guidebooks including *Breaking Through, A Technical Guide for the Design and Development of CD-ROMs,* and *Multimedia Demystified;* market research information; and more. Then you'll receive quarterly mailings with additional marketing and technical information.

Customers outside the U.S. can order the Apple Multimedia Information Mailing through their local reseller (see list on page 62).

Special User Notes

To run quarterly CDs, a Macintosh computer with System 7 or later and a CD-ROM drive is required; a videocassette player is required to view videotapes.

This product may contain Class 1b beta release products and Class 2 restricted products. Beta releases of products are not fully tested and documented, but are expected to be completed in the future. Class 2 products are not tested, and documentation may still be in preliminary draft form.

New Subscription (PAL)
R0494LL/A **$149.00**

New Subscription (NTSC)
R0495LL/A **$149.00**

Subscription Renewal (PAL)
R0496LL/A **$149.00**

Subscription Renewal (NTSC)
R0497LL/A **$149.00**

FOR INFORMATION ON
APPLE MULTIMEDIA PROGRAM
which includes the Apple Multimedia Information Mailing
SEE PAGE 46

Macromedia, Inc.

DECK II 2.5 Digital Audio Workstation Software

Accelerated for Power Macintosh

DECK II 2.5 is the first multi-track audio studio that's entirely software-based. Record up to 999 tracks of CD-quality audio. Playback 8-16 simultaneous real-time tracks with unlimited digital bounce and mix-to-disk. Add synchronized MIDI tracks, build elaborate moving-fader mixer automations and custom crossfades, synchronize with analog video via SMPTE time code, or use DECK's advanced QuickTime Chase spotting feature for seamless multimedia audio post-production. DECK features the fastest and most flexible graphic editing interface of any digital audio workstation product, plus extensive import/export, downsampling, and file conversion features, including support for QuickTime, SDII, AIFF, SND, and .WAV files. You can even save your finished QuickTime and audio session as QuickTime for Windows files.

Requirements

Macintosh or Mac OS-compatible computer with 16-bit audio (either built-in or through a third-party sound card); 8 MB RAM; 2 MB hard disk space (plus additional space for recording); System 7.5 or later.

T1875Z/A **$399.00**

Macromedia, Inc.

Director 4.0

Accelerated for Power Macintosh

Director 4.0 features increased performance, 48 channels in the score, 32,000 cast members, revised user interface, new lingo commands, and all-new tutorials and examples. Produce dynamic interactive presentations, entertainment and educational CD-ROM titles, demo disks, information kiosks, technical visualizations, simulations, and videotape productions. Combine text, graphics, animation, sound, and digital and analog video from different sources, including other Macintosh applications. Control videodisc, CD-ROM, videotape, and special effects cards.

Requirements

Macintosh or Mac OS-compatible computer with a 68030 or greater processor; 4 MB RAM; 30 MB hard disk space; System 7.0 or higher; 13" color monitor; QuickTime extension (included for QuickTime support).

Note

Product available through catalog to U.S. customers only. Customers located outside the U.S. should contact the manufacturer for resellers in their area.

T1745LL/A *(U.S. only)* **$895.00**

Apple Computer, Inc.

QuickTake Software Developer's Kit

Included in DEVELOPER MAILING

The QuickTake Software Developer's Kit gives the application developer the ability to take total software control of the QuickTake 150 and QuickTake 100 digital cameras. Through included APIs in the SDK, the developer can create applications that control camera functions including image capture; change quality or resolution settings; set the timer; delete images; download images or view thumbnails; and change flash settings. The SDK can be used to develop QuickTake savvy applications, OpenDoc components, plug-ins, HyperCard XCMDs, or OLE servers.

Requirements

Macintosh: Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 5 MB RAM; 10 MB hard disk space; System 7.1 or later.

Power Macintosh: Power Macintosh or Mac OS-compatible computer with a PPC 601 or greater processor; 8 MB RAM; 10 MB hard disk space; System 7.1 or later.

Windows: IBM or IBM-compatible computer with a 80386 or greater processor; 2 MB RAM; 10 MB hard disk space; Windows 3.1, DOS 3.0 or later.

A QuickTake camera is required for application development and testing.

R0597LL/B **$49.95**

Orders are shipped within 24 hours. **Order Toll-free Monday through Friday, 7am-5pm, PST.** U.S.: **1-800-282-2732**

Multimedia Labs, Inc.

TC1490-7Sub Killer System

The professionals' "number one choice" for sound performance is the TC1490-7Sub audio computer sound system. It includes three separate hi-fi components engineered for Mac/PC professional sound reproduction performance at your desktop.

Features

- The TC1490 integrated amp delivers 40 watts rms per channel at less than 1% THD from 20 Hz to 20 kHz, 5 band + or – 12 dB per octave equalized. Thinline, 40 mm-high chassis is engineered to support any monitor up to 20" in screen size.
- The SP7006P Killer subwoofer provides home theater performance utilizing a 6½", 80 watt rms subwoofer equipped with dual 1½" voice coil technology. SP7006P may be placed vertically or horizontally on the floor.
- The SP510 satellite speaker pair offers true 2-way full-range double-port bass reflex cabinet made of the most advanced poly material. Both internal 5¼" mid low and 1" dome drivers are shielded. All instructions, wires, and cables are included for easy setup.

Requirements

Macintosh or Mac OS-compatible computer; 4 MB RAM; must be multimedia equipped for stereo use.

T1870Z/A **$179.95**

Monitor not included

Books and References

For books and references in the Multimedia category, see page 53.

Apple Computer, Inc.

Apple MPEG Starter Kit

The Apple MPEG Media System is an MPEG-1 hardware playback card that plays back digital video at 30 fps in 16-bit YUV color and with 16-bit CD sound. The Apple MPEG Media System, utilizing the C-Cube CL450, allows enough bandwidth for even an affordable 68040 CPU to smoothly play the most interactive MPEG games and titles.

In order to simplify the task of MPEG title development, the Apple MPEG Media System is tightly integrated with QuickTime—so standard QuickTime calls work every time. This means that existing titles can be quickly and effortlessly ported over to MPEG. In addition, chapter navigation support is built right in so Laser Disc content can be easily adapted.

The MPEG card is user installable into the LC PDS slot found on the Macintosh 630 series of computers, the Macintosh 580 series of computers, and the Power Macintosh 5200, 5300, 6200, and 6300 series of computers.

The Apple MPEG Starter Kit is a version of the Apple MPEG media system designed specifically for developers.

Features

- MPEG-1 playback card
- MPEG software extensions
- 5 bundled MPEG titles
- MPEG developer's brief
- Sample MPEG bitstreams

Requirements

Power Macintosh, Macintosh, or Mac OS-compatible computer with a 68040 or greater processor; 8 MB RAM; 2 MB hard disk space; System 7.5 or later; LCPDS and video slot; AppleVideo or TV/Video system.

M3763LL/A **$249.00**

Terran Interactive

Movie Cleaner Pro 1.1

Movie Cleaner Pro is the most powerful QuickTime compression tool available. Designed by multimedia professionals, Movie Cleaner Pro produces high quality video quickly and easily.

Features

- Powerful Batch Processing allows you to simply drag and drop up to 2,000 movies onto the program icon and you're done.
- Suspend and Resume lets you stop compression at any time and then flawlessly continue where you left off.
- Advanced Settings make it easy to adjust data rates, A/V fades, and a lot more.
- Expert System analyzes your application and suggests optimum settings.
- "Talking Heads" filter maximizes the most important areas of your video.

Requirements

Macintosh or Mac OS-compatible computer with a 68040 or greater processor; 8 MB RAM; 1 MB hard disk space; System 7 or later; QuickTime 2.0 or later.

T1884Z/A **$129.95**

Equilibrium

DeBabelizer Toolbox 1.6.5

DeBabelizer Toolbox is a robust, versatile application that saves time, effort, and money by offering automated graphics processing, image manipulation, and unrivaled cross-platform file translation capabilities–all in a single, integrated application. This award-winning product includes dozens of essential editing tools for automated image processing while also providing extensive translation for over 60 bit-mapped graphics and animation formats for Macintosh, PC (DOS and Windows), Amiga, SGI, and SUN workstations. Support for the interlaced GIF format, as well as JPEG and PNG are now included, making DeBabelizer an essential tool for Web page creation. Also featured is unsurpassed 24-bit to 8-bit color reduction and comprehensive palette controls including SuperPalette which automatically creates the best palette for a series of images. Integrated batch processing and internal scripting save time by automating repetitive editing and manipulation tasks.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 2.6 MB RAM; 2.6 MB hard disk space; System 6.0.7 or later.

Note

Product available through catalog to U.S. customers only. Customers located outside the U.S. should contact the manufacturer for resellers in their area.

Single User

T1906LL/A *(U.S. only)* **$289.00**

5-User

T1907LL/A *(U.S. only)* **$1,135.00**

E.T.O.: Essentials • Tools • Objects

Apple's deluxe collection of core programming tools

Apple Computer, Inc.

E.T.O. has set the industry standard for providing professional software developers with regular updates to core development tools by subscription since 1990. Subscribers automatically receive the tools on CD three times during the subscription year—and at a very affordable price.

E.T.O. brings together a deluxe collection of Macintosh core development tools, designed to support C, C++, and assembly-language programmers. It contains a robust development environment (Macintosh Programmer's Workshop), compilers, debuggers, application frameworks, and testing tools that you can use to streamline application development for 68K and Power Macintosh systems.

Although E.T.O. includes a complete development system, it also includes many components that work well with other popular development environments, particularly Metrowerks CodeWarrior and Symantec C++ for Power Macintosh. So it's a wise purchase regardless of your development environment preference.

Major E.T.O. software components include:

MPW Shell The Shell is the centerpiece of the Macintosh Programmer's Workshop (MPW) development environment. It is an integrated multiwindow text editor and command executer which supports numerous built-in commands and a powerful scripting language that allows you to customize the environment to suit your needs. The Shell also includes Projector, an integrated source code control system that simplifies the management of large, complex software projects being worked on by a team of programmers.

SC/SCpp — C and C++ Compilers (68K) These are new ANSI-compliant 680x0-code-generating C and C++ compilers that are faster than previous compilers included with MPW, run in native mode on a Power Macintosh, and support the new CFM-68K runtime model.

MrC/MrCpp — C and C++ Compilers (PowerPC) These are new MPW compilers which offer greatly improved turnaround time and also generate efficient and highly-optimized PowerPC code for fast binary execution on Power Macintosh systems. MrC adheres to the ANSI C standard (ANSI X3.159-1991) and MrCpp adheres to the ANSI C++ working paper (ANSI X3J16), except for templates and exception handling.

Assemblers (68K and PowerPC) Two assemblers are included, one which supports the full 68xxx instruction set and the other which supports the PowerPC instruction set. The 68xxx assembler supports all the instructions and addressing modes for the MC68000, MC68010, MC68020, and MC68030 microprocessors, the MC68851 Paged Memory Management Unit (PMMU), and the MC68881 and MC68882 Floating-Point Coprocessors, in all usable combinations.

MPW Tool and Script Suite Dozens of tools and scripts are included to assist you in the development process. These include linkers, a Make tool, resource manipulation and analysis tools, file comparison utilities, and many more.

MacApp This is an advanced object-oriented application framework and class library which can be used to streamline the development of Power Macintosh and 680x0 applications through the benefits of object-oriented programming.

SourceBug This is a source-level debugger that provides basic debugging capabilities for 68K applications, such as setting breakpoints, controlling program execution, and displaying the contents of variables. It also has special support for debugging object-oriented code.

E.T.O. REFERENCE BOOKS

E.T.O. includes electronic versions (in Adobe Acrobat format) for all the books listed below. These books are also available individually in printed form.

New Edition! Building and Managing Programs in MPW Describes all aspects of building and managing your software programs using MPW. It gives an overview of the build process, the runtime architectures available, and the types of programs you can build.
R0698Z/A **$30.00**

MrC/MrCpp: C/C++ Compiler for Power Macintosh Covers MrC and MrCpp, which are ANSI-compliant, MPW-based C and C++ compilers that produce highly optimized code for the PowerPC environment.
R0690Z/A **$15.00**

New Book! SC/SCpp: C/C++ Compiler for 68K Macintosh Describes SC and SCpp, the MPW-based compilers that generate 680x0 code.
R0699Z/A **$15.00**

MPW Assembler Reference (68K) Explains how to prepare source files to be assembled by the MPW 68K Assembler.
R0591LL/A **$25.00**

Assembler for Macintosh with PowerPC Describes how to write assembly-language programs that execute under the Macintosh operating system.
R0624LL/A **$15.00**

SourceBug Reference Lists the most important components and features of the debugger in both reference and tutorial form.
R0217LL/B **$10.00**

Macintosh Debugger Reference Shows how you can use the Macintosh Debugger to debug your programs and, for PowerPC debugging, measure their performance.
R0689Z/A **$15.00**

MacsBug Reference and Debugging Guide Covers MacsBug, Apple's assembly-language debugger for Macintosh programmers.
R0063LL/A **$24.95**

ResEdit Reference Describes ResEdit, an extensible stand-alone resource editor for the Macintosh computer—a powerful tool you can use to speed your software development process and to create icons, menus, and other resources for Macintosh programs and files.
M0015LL/D **$15.95**

New Book! Programmer's Guide to MacApp Covers the architecture of MacApp 3.3 and describes how to make effective use of it. It also describes the programming features of MacApp and includes sample code and recipes for implementing a variety of features.
R0700Z/A **$35.00**

All Manuals Above as a Set
R0701Z/A **$149.00**

Note: The following book is included with the E.T.O. product. It is also sold separately for the benefit of site licensees who may wish to purchase additional copies.

Introduction to MPW, Second Edition Contains introductory material you need to know before you can use the MPW development environment to create Macintosh software.
R0600LL/B **$15.00**

Orders are shipped within 24 hours. **Order Toll-free Monday through Friday, 7am-5pm, PST.** U.S.: **1-800-282-2732**

E.T.O.: Essentials • Tools • Objects
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© 1996 Apple Computer, Inc. Apple, the Apple logo, and Macintosh are trademarks of Apple Computer, Inc., registered in the U.S. and other countries.

Power Macintosh Debugger
This powerful PowerPC debugger features an easy-to-use interface that allows you to set breakpoints, examine and change the contents of memory and registers, and view your code at either the assembler or source level. It can also be used to trace your application's execution or gather performance data. It works in a one-machine or two-machine environment, thus allowing you to debug almost any type of code running on the target system. The Power Macintosh Debugger can be used with symbol files emitted by MPW, Metrowerks CodeWarrior, and Symantec C++ for Power Macintosh environments.

MacsBug This is a low-level debugger for debugging software at the assembly-language level (680x0 or PowerPC). It loads at system startup time and idles until it is invoked either manually (by pressing the interrupt switch or a key that you define) or programmatically (by calling special traps from within your program). And since MacsBug needs so little of the system to operate, it can be used even in the case of fatal system errors.

ResEdit This is a graphical resource editor for creating and editing elements of the Macintosh user interface such as menus, windows, icons, dialog boxes, and other standard data structures. Programmers and advanced users can quickly create portions of their application's user interface as well as modify an existing interface.

Macintosh Programmer's Toolbox Assistant
This is a useful on-line reference tool which provides rapid up-to-date access to information on all aspects of the Macintosh API, including toolbox managers, data structures, routines, constants, resources, and MPW commands. MPW scripts and tools are also provided that let you access it directly from the MPW environment using "hot keys." It is also easily accessible from CodeWarrior or Symantec C++.

E.T.O. RELEASES ARE SCHEDULED FOR
APRIL, AUGUST, AND DECEMBER
EACH YEAR

Virtual User Virtual User is a test automation system that enables a host Macintosh to control the actions of target Macintosh computers remotely. The host executes tests on one or more target machines by reading the commands it is to issue from a file called a script. The script is a text file written in the Virtual User scripting language. This interpreted procedural language provides Virtual User with the ability to recognize and manipulate various elements of an application's human interface, compare the actual result of a command with an expected result, and branch logically according to the result of the comparison.

...and More! Some of the interesting enhancements we have planned for E.T.O. in the coming months are the OpenDoc Development Framework (ODF) for streamlining the creation of OpenDoc components (it can be used with MPW, Metrowerks CodeWarrior, or Symantec C++ for Power Macintosh); and a version of the highly-optimizing MrC/MrCpp compiler that works in the Metrowerks CodeWarrior environment. Watch our web site at **http://www.devtools.apple.com** for the latest information.

Note that E.T.O. also includes prerelease versions of several tools, thus providing you with early access to bug fixes and enhancements.

Reference Books
E.T.O. comes with a printed reference book that introduces you to the MPW development environment—*Introduction to MPW*.

An electronic version of this manual and of the manuals for all the major components of E.T.O. are also provided. You can easily print the electronic manuals yourself or order printed manuals separately (see sidebar on page 12).

How to Order
To get E.T.O., order the New Subscriber Package. This will give you all the software described, the printed *Introduction to MPW*, and the next two updates to E.T.O. as they are released.

Special Ordering Notes

- *To renew your existing E.T.O. subscription, order the Annual E.T.O. Subscription Renewal (3 issues) product.*
- *If you already own Apple's MPW product, you can upgrade to an E.T.O. subscription simply by purchasing the Annual E.T.O. Subscription Renewal (3 issues) product.*

Special User Note

The list of components included on E.T.O. is subject to change without notice. For a detailed product description, visit our World Wide Web site at ***http://www.devtools.apple.com.***

This product may contain Class 1b beta release products and Class 2 restricted products. Beta releases of products are not fully tested and documented, but are expected to be completed in the future. Class 2 products are not tested, and documentation may still be in preliminary draft form.

Requirements

Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 8 MB RAM (16 MB or more strongly recommended); System 7 or later; CD-ROM drive. RAM requirements vary depending on the tools being used.

A Power Macintosh is required for execution of PowerPC code. The Power Macintosh compilers and tools run in 680x0-based systems or in Power Macintosh emulation mode; some tools are also provided for use in Power Macintosh native mode.

E.T.O.: Essentials•Tools•Objects
New Subscriber Package
M0895LL/C **$195.00**

Annual E.T.O. Subscription Renewal (3 issues)
R0076LL/B **$125.00**

COMING IN MAY!
An easy way to combine E.T.O. with the development environment of your choice.
Save even more money
when you buy either the E.T.O./Metrowerks CodeWarrior Bundle or the E.T.O./Symantec C++ Bundle.

E.T.O. News

Apple's E.T.O. product has recently undergone significant changes to enhance its usefulness and appeal. The biggest news is a new lower price—it's now only $195! We've been able to reach this price level by adjusting the mix of components and, for the first time, making the complete set of printed books an optional add-on instead of a requirement.

Thanks to all of you who have provided suggestions on how to make E.T.O. more valuable.

Today, E.T.O. is an excellent product with a complete C/C++ development environment—MPW. Looking forward, our goal is to make E.T.O. an indispensable addition to your set of Macintosh tools, regardless of the development environment you use. Over the coming months, for example, we expect to include a drop-in version of the MrC/MrCpp compiler that works in the Metrowerks CodeWarrior environment; the OpenDoc Development Framework for use in the MPW, CodeWarrior, and Symantec C++ environments; and Macintosh Debugger 2.1 for use in these same three environments.

We trust these changes are to your liking. Good programming!

E.T.O. Product Manager
dev.tools@applelink.apple.com

Quasar Knowledge Systems, Inc.

SmalltalkAgents 2.0

SmalltalkAgents (STA) is a sophisticated software development environment featuring a new generation of the Smalltalk language, QKS Smalltalk. STA's dynamic development environment provides enhanced productivity. The development process is dynamic, interactive, and iterative.

The foundation of the QKS Product family is the Agents Object System (AOS), a value-added collection of "components" and "services" embedded in SmalltalkAgents. Features include a Cyberspace engine, DTP/word processing engine, a database collaboration engine, distributed objects, a full-featured compiler, and cross-platform frameworks and components. Components from non-AOS sources can be integrated seamlessly into the AOS system.

Features

- "Live" direct manipulation of objects–our Dynamic GUI Builder enables "live" real-time creation and manipulation of objects and code.
- Provides full access to the features of the Mac OS and Mac Toolbox just like C/C++ and Assembly.
- External Code Linking Toolkit (ECLT) supports easy linking to non-Smalltalk code resources (C/C++, Pascal, FORTRAN, and Assembly).
- Automatic garbage collection and object typing will free you from tedious memory management and bookkeeping chores.
- Enables increased productivity through a sophisticated database for source code management.
- An Application Delivery Toolkit (ADT) allows you to create royalty-free, stand-alone, double-clickable applications in a matter of minutes.
- STA is architected to transparently support WorldScript and UNICODE international character sets.

Requirements

Macintosh or Mac OS-compatible computer with a 68030 or greater processor; 8 MB RAM; 30 MB hard disk space; System 7 or later.

T1547LL/B **$695.00**

Symantec Corporation

Symantec C++ for Power Macintosh 8.4

Now, through a joint development agreement, Symantec and Apple Computer let you produce the fastest Power Mac code.

Symantec C++ for Power Macintosh now comes with MrC–Apple's new optimizing compiler.

Industry-standard Nullstone tests show that applications compiled with MrC run an average of 22% faster.

Features

- AppleScript support to automate repetitive tasks
- New Project Manager to organize and navigate nested projects
- Multi-threaded environment lets you edit and write code while compiling
- Subscription program automatically provides two free product updates

Requirements

Power Macintosh or Mac OS-compatible computer with a PPC 601 or greater processor; 8 MB RAM (12 MB recommended); System 7.0 or later; CD-ROM for software installation.

Note

Symantec C++ for Power Macintosh 8.4 only generates code for PowerPC-based Macintosh computers. A copy of Symantec C++ 7.0 is included for those programming for the 68K-based platform. THINK C 6.0 is also included.

T1669LL/B **$349.00**

Symantec Corporation

THINK Pascal 4.0

Professionals and students will welcome the rapid turnaround time offered by this fully integrated version of THINK Pascal that lets you take advantage of System 7 capabilities. Features include support for large projects, enhanced THINK Class Library, System 7 compatibility, superior code generation and smart linking. It comes with four Macintosh disks, a 562 page user manual, and a 498 page object-oriented programming manual.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 1 MB RAM (4 MB recommended for the THINK Class Library or MacApp); System 6.0 or later.

T0068LL/D **$165.00**

Fortner Research LLC

LS FORTRAN for Power Macintosh 1.1

LS FORTRAN for Power Macintosh is a full-featured optimizing ANSI FORTRAN 77 compiler with extensions for VAX, Cray, Data General, and Microsoft FORTRAN. It includes compilers for both Power Macintosh and 68K and is fully System 7.5 compatible. It supports a complete 32-bit programming model and includes MPW, source level debuggers, built-in debugging, free runtime licenses, and virtual memory support. A variety of third-party tools are available separately to customize any FORTRAN environment.

A number of unique diagnostic features are built into the runtime libraries and do not require the use of a separate debugger. For example, an execution-tracing window monitors source file, subroutine name, and line number in real time.

Fortner Research also ships a FORTRAN compiler for the 68K Macintosh. Source code is compatible between these 2 compilers. Programs originally developed with the 68K version execute 4 to 6 times faster by running the same program on a Power Macintosh.

Requirements

Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 5 MB RAM; 15 MB hard disk space; System 7 or later; CD-ROM drive.

T1602LL/A **$695.00**

Fortner Research LLC

LS Object Pascal CD-ROM 1.0

This full-featured Object Pascal compiler runs on Power Macintosh or 68K Macintosh computers. It is compatible with Apple's Object Pascal 3.3, runs in the MPW environment, and features innovative new runtime diagnostics.

LS Object Pascal includes universal toolbox interfaces for 68K or native Power Macintosh applications and AppMaker, a visual interface design tool that generates Pascal source code to run the user interface automatically. A native porting kit is included for converting programs written with MacApp 2.0.

The CD-ROM provides complete online documentation. With LS Object Pascal, your existing Pascal programs can be ported to Power Macintosh without converting to C++!

Requirements

Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 3 MB RAM; 10 MB hard disk space; System 7 or later; CD-ROM drive.

T1601LL/A **$399.00**

Orders are shipped within 24 hours. **Order Toll-free Monday through Friday, 7am-5pm, PST.** U.S.: **1-800-282-2732**

Metrowerks, Inc.

CodeWarrior Gold 8

With CodeWarrior's plug-in architecture, choose your target platform from within one Integrated Development Environment. Gold supports the following platforms:

PowerPC: Mac OS, PowerTV, BeOS for BeBox
68K: Mac OS, Magic Cap
x86: Windows 95, Windows NT

It includes C/C++ and Object Pascal.

Features

- Integrated class browser
- Faster code, better code generation for PowerPC
- Updated OpenDoc support
- New networking classes in PowerPlant
- New editor functions
- Zero overhead exceptions for C++
- Libraries for the new Be Operating System

T0937LL/G **$399.00**

CodeWarrior Bronze 8

This Macintosh programming solution generates code that runs native on 68K and runs emulated on PowerPC, and supports C/C++ and Object Pascal.

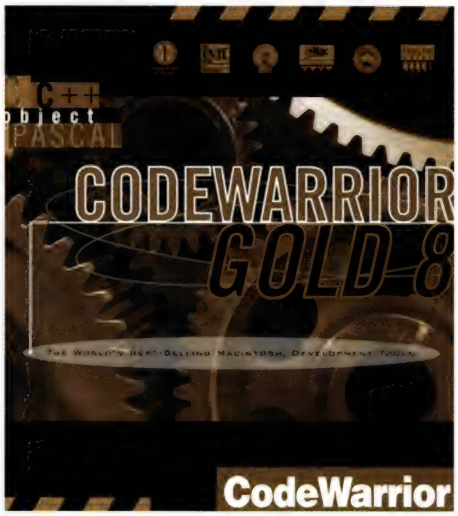
T0938LL/H **$149.00**

Requirements

Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 8 MB RAM; 25 MB hard disk space; System 7.1 or later (for 68K Macintosh) or System 7.1.2 or later (for Power Macintosh); Color QuickDraw; CD-ROM drive.

Notes

Two free updates from manufacturer with Gold and Bronze. Register with Metrowerks and receive world-class support.



See Page 57 for Asian, Latin American, and European localized versions of CodeWarrior Gold and Bronze!

Discover Programming for Macintosh

(The Official CodeWarrior Starter Kit)

Discover Programming brings together all the resources you'll need to start and complete your programming education. Designed for both novice and experienced programmers, the CD contains three online programming books as well as a full working copy of the best Macintosh development environment you can buy—CodeWarrior.

T1878Z/A **$79.00**

CodeManager

Microsoft Visual SourceSafe 4.0-compatible source code control system for the Macintosh.

T1829Z/A **$399.00**

Inside CodeWarrior 8

Printed version of Metrowerks online documentation.

T1648LL/C **$34.95**

Inside PowerPlant

Printed documentation for Metrowerks CW8 PowerPlant application framework.

T1902Z/A **$34.95**

Microsoft Corporation

Visual C++ Cross Development Edition for Macintosh 4.0

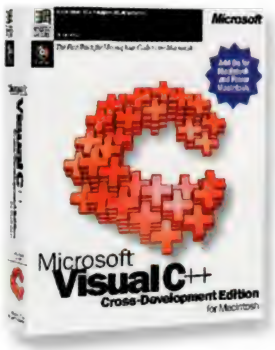
Learn one toolset, increase your user base, and knock months off your development time. With this Visual C++ add-on toolset, you can use up to 90 percent of the code from your Windows-based application to create the same application for the Macintosh, with the familiar Macintosh interface.

Features

- Port Windows-based features easily to the Macintosh, including multiple document interface, print preview, and floating toolbars.
- True native Macintosh programming—program directly to the System 7 API to take advantage of unique Macintosh features such as Publish and Subscribe.
- Recompile for the Macintosh—target both the Windows and Macintosh operating systems using just one set of source code written to Microsoft Foundation Classes and the Microsoft Win32 API.
- Power Macintosh support, including a fully optimizing compiler, an integrated debugger that adapts to the PowerPC chip when displaying information in the register contents, and disassembly windows.
- Code Fragment support for the Power Macintosh, which translates to better code sharing among applications and faster, trimmer applications.
- OLE support—port your Win32 and MFC OLE applications to the Macintosh using OLE for the Macintosh version 2.06.
- ODBC support—call ODBC directly or use it through the appropriate MFC classes.

Requirements

Host: IBM or IBM-compatible computer with 80486 or greater processor; 16 MB RAM (20 MB recommended); 70 MB hard disk space; Windows NT 3.5.1 or Windows 95; Visual C++ 4.0; CD-ROM drive.



Target: Power Macintosh, Macintosh, or Mac OS-compatible computer with 68020 or greater processor; 8 MB RAM (16 MB recommended and required for OLE development); 20 MB hard disk space; System 7 or later; CD-ROM drive.

Ethernet hardware supporting an Ethernet AppleTalk or TCP/IP network connection between the PC and Macintosh.

T1740Z/A **$1,999.00**

Apple Computer, Inc.

Macintosh Common Lisp 3.0

This object-oriented dynamic language is fully integrated with the Macintosh and includes a fast incremental Common Lisp compiler, a rich set of Lisp programming tools, and an extensive library of Common Lisp Object System (CLOS) objects, including Macintosh user interface objects. Macintosh Common Lisp (MCL) is especially well-suited for rapid prototyping and cost effective delivery of applications.

Features

- Interactive dynamic environment
- Fast, incremental Common Lisp compiler
- Industry-standard implementation of Common Lisp and CLOS
- Multiple processes
- Sophisticated object-oriented error condition system
- Smart programmable tools for prototyping, programming, and debugging, including an interface toolkit, a source code stepper, a symbolic debugger, a dynamic object inspector, and a stack backtrace
- Full programmable syntax-aware editor
- Automatic memory management, which is handled incrementally by an ephemeral garbage collector
- Foreign-function interface, allowing Lisp programs to call functions created with MPW languages such as C, Pascal, and Assembler
- Full Lisp source code for many examples and utilities
- Smaller application footprint

Licensing Notes

You may ship any quantity of applications created with MCL with purchase of the Macintosh Common Lisp Redistribution Kit. Affordably priced site licenses are available for this product. Call Apple Software licensing at 1-512-919-2645 for site licensing details.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 4 MB RAM; 8 MB hard disk space; System 7 or later; CD-ROM drive.

Macintosh Common Lisp 3.0

R0167Z/C **$595.00**

Macintosh Common Lisp 3.0 Upgrade

R0561Z/B **$135.00**

Macintosh Common Lisp Redistribution Kit

R0656Z/A **$400.00**

Macintosh Common Lisp Compiler Redistribution Kit

R0657Z/A **$2,000.00**

Absoft Corporation

Absoft C/C++ SDK for Power Macintosh

This complete software development kit for C/C++ includes ANSI C, K&R C and C++ Plum Hall validated compilation systems. Excellent workstation code compatibility. It supports templates, exceptions, STL, long long, and is fully link compatible with Absoft F77. The SDK includes PPC and 68K code generators, debugger, class browser, profiler, Macintosh Runtime Window Environment (MRWE) application framework, two graphics libraries, great error messages, and Apple's MPW. It supports Macintosh Toolbox and all MPW tools, and includes a 150 page illustrated manual.

Requirements

Power Macintosh or Mac OS-compatible computer with a PPC 601 or greater processor; 16 MB RAM; 12 MB hard disk space; System 7.1.2 or later.

In Japan contact

SENKO Corporation:
(Tel) 81 45 320 2711
(Fax) 81 45 320 9342
E-Works: (Tel) 81 3 3590 2931
(Fax) 81 3 3590 2930

T1664LL/A **$399.00**

Absoft Corporation

MacFortran II 3.4 for 68K Macintosh

The world's most popular FORTRAN 77 for Macintosh is VAX/VMS compatible, full ANSI/ISO, MIL STD-1753 validated. Acknowledged to generate the fastest executing code for 68K based Macintosh systems, this product is a full development kit and includes Absoft's Macintosh Runtime Window Environment (MRWE) application framework (with fully documented source code as examples), two graphics libraries, a symbolic debugger, Absoft CreateMake (ACM), and Apple's MPW. It supports System 7.5, Apple events, the Macintosh Toolbox, and all MPW tools, and may be used in conjunction with Absoft's F77 SDK on Power Macintosh (emulation mode) to create 'fat' binaries. It is source compatible with F77 SDK and includes a 450-page illustrated manual with examples.

Requirements

Macintosh or Mac OS-compatible computer with a 68020 or greater processor and FPU; 8 MB RAM; 10 MB hard disk space; System 7.1.2 or later.

In Japan contact

SENKO Corporation:
(Tel) 81 45 320 2711
(Fax) 81 45 320 9342
E-Works: (Tel) 81 3 3590 2931
(Fax) 81 3 3590 2930

T0254LL/F **$550.00**

Absoft Corporation

Absoft F77 SDK for Power Macintosh

Absoft F77 SDK is the world's best-selling FORTRAN software development kit for Power Macintosh Programmers. F77 SDK includes globally optimizing code generators for both PPC (plus 604 optimizer) and 68K, graphical debugger, browsers, 2D array display, linker, MRWE application framework written entirely in FORTRAN (full source included), two graphics libraries, performance profiler, Absoft CreateMake, VAX/VMS and UNIX compatibility libraries, several utilities, latest version of MPW, and 450+ pages of fully illustrated documentation.

Absoft F77 SDK is link compatible with Absoft F90 (beta) and CodeWarrior, and supports Apple events, Publish and Subscribe, and AppleScript. It is fully compatible with the Toolbox, other MPW tools and languages, and most third party products. F77 is source compatible with Absoft F77 compilers for Windows 95, Windows NT, and UNIX.

Requirements

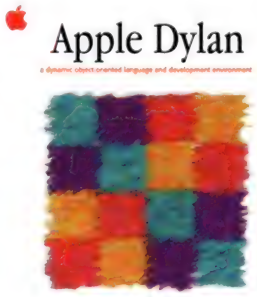
Power Macintosh or Mac OS-compatible computer with a PPC 601 or greater processor; 16 MB RAM; 21 MB hard disk space; System 7.1.2 or later.

T1171LL/A **$699.00**

Apple Computer, Inc.

Apple Dylan Technology Release

The Apple Dylan Technology Release is a prototype version of a Macintosh development environment based on the Object-Oriented Dynamic Language (OODL) Dylan. Applications under development can be run on any Macintosh and will run native on the PowerPC.



Features

- Customizable browsers
- Incremental development environment
- Dylan application framework and Dylan user-interface builder
- Cross-language support for C code and APIs

Requirements

Macintosh or Mac OS-compatible computer with a 68030 or greater processor; 20 MB RAM; 8 MB hard disk space; System 7.1 or later.

M4724Z/A **$39.95**

Orders are shipped within 24 hours. **Order Toll-free Monday through Friday, 7am-5pm, PST.** U.S.: **1-800-282-2732**

Motorola RISC Software

Motorola PowerPC Development Tools

Motorola PowerPC C/C++ and FORTRAN Software Developer Kits produce aggressively optimized applications from within a fully-integrated MPW environment. Motorola compilers can optimize code for any specific PowerPC microprocessor, while ensuring that the binary will be fully compatible with any member of the PowerPC family.

Features

- ANSI-compliant front ends
- Multiple optimization levels
- Native and cross compilers
- Kuck and Associates preprocessor (KAP)
- Apple MPW and tools
- Complete documentation

Requirements

Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 8 MB RAM; 10-16 MB hard disk space; System 7 or later; CD-ROM drive.

C/C++ SDK

T1868Z/A **$349.00**

FORTRAN SDK

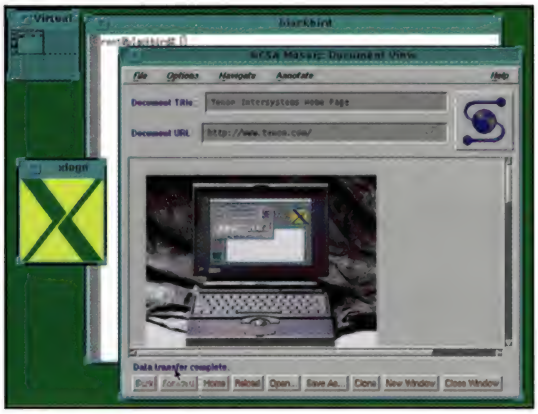
T1869Z/A **$349.00**

Books and References

For books and references in the Languages and Environments category, see page 53.

Tenon Intersystems

Power Mach[Ten] for Macintosh



With Tenon's new PowerPC native Mach[Ten], you can develop PowerPC, UNIX, and Macintosh applications using standard UNIX C and C++ tools. You also can use standard Power Macintosh software development tools such as Metrowerks' CodeWarrior and Apple's MPW to develop Mach[Ten] UNIX applications.

Power Mach[Ten] is a BSD/MACH UNIX that runs on all Power Macintosh computers and those accelerated with PowerPC upgrade cards. Mach[Ten]'s strength lies in the way it extends the Macintosh operating system with UNIX networking and software development tools. The Macintosh/UNIX integration is so strong that you can even use Macintosh programs and utilities on UNIX data, and UNIX programs and utilities on Macintosh files.

Full Internet protocol support ensures fast, easy client and server NFS, e-mail, and file transfer between the Macintosh and all TCP-based entities on your network. Built-in Internet services include domain name service, POP mail service, Internet routing, SLIP & PPP, and Web service.

Full X11R5 support with Motif make developing distributed applications a breeze. And, Tenon's high-performance X server lets you use your Power Macintosh as an X terminal.

Features

- Full Macintosh application compatibility
- Industry-standard UNIX software development environment
- Internet communications support
- Distributed File System with NFS client and server
- X Window development environment with Motif
- High-performance X server with mwm and olvwm

Requirements

Power Macintosh, Macintosh, or Mac OS-compatible computer with a 68000 or greater processor; 8 MB RAM (16 MB RAM for Power Macintosh); 80 MB hard disk space (100 MB for Power Macintosh); System 7 or later.

Power Mach[Ten] (for Power Macintosh)

T1718Z/A **$695.00**

Personal Mach[Ten] (for 68K Macintosh)

T1754Z/A **$495.00**

Professional Mach[Ten] (for 68K Macintosh)

T1755Z/A **$695.00**

Mach[Ten] X Window Software (for 68K Macintosh)

T1753Z/A **$350.00**

Mach[Ten] Ported Application CD (applications for 68K-based Mach[Ten])

T1752Z/A **$50.00**

Mach[Ten] Technical Documentation (supplemental documentation for 68K-based Mach[Ten])

T1751Z/A **$300.00**

STAZ Software, Inc.

FutureBASIC II 2.0 and Program Generator

FutureBASIC II (FB II) is a powerful, easy-to-use, BASIC compiler and editor. You can create and modify your source code in the editor and test your work without switching to a separate compiler. FB II generates applications that run at speeds equal to C and Pascal, yet it is much easier to learn. You can create custom, double-clickable applications that address all of the elements of the Macintosh interface. You can also use FB II to generate code resources like XCMDs, MDEFs, WDEFs, and extensions.

Program Generator allows you to edit menus; build windows; create application resources; and draw edit fields, controls, picture fields, clickable icons, and scrolling lists. Finished code runs in FB II and can automatically handle text editing, core events, updates, and more. PG may be used as a prototyping tool, a resource editor, or a CASE tool.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 1 MB RAM; 8 MB hard disk space; System 6.0.5 or later.

T1883Z/A **$229.00**

Natural Intelligence, Inc.

Roaster

Be the first Macintosh developer on your block to take advantage of the unique capabilities of Sun's new Java programming language! Roaster, new from Natural Intelligence, Inc., is the first development environment for writing, testing, and running Java applets on the Macintosh.

Features

- Fully integrated development environment
- Project window that includes a Finder-like view of packages
- Lightning-fast, Power Macintosh native compiler
- Source code editor with powerful search features and intuitive user interface
- Run-time engine for quick and easy applet testing
- Unlimited technical support throughout your subscription
- Free updates up to and including the next two commercial releases of Roaster

Requirements

Power Macintosh or Mac OS-compatible computer with a PPC 601 or greater processor; 8 MB RAM; 30 MB hard disk space; System 7.1.2 or later.

T1872Z/A **$299.00**

Pictorius, Inc.

Prograph CPX

The integrated editor, interpreter, and debugger in a visual, object-oriented environment lets you create and compile robust applications fast.

Features

- Fully pictorial OOP language
- Project-oriented structure that supports multiple files
- Seamlessly integrated development and debugging environment
- Interface-building support via Prograph's 150 Application Building Classes (ABCs) and 150 Application Building Editors (ABEs)
- Stand-alone compiler for generating 68K and Power Macintosh, royalty-free, stand-alone, double-clickable applications

Prograph CPX supports calls to C code resources and to unmodified C libraries. Includes a year of free support and updates.

Requirements

Power Macintosh, Macintosh, or Mac OS-compatible computer with a 68020 or greater processor; 7 MB RAM; 17 MB hard disk space; System 6.0.7 or later.

T1077LL/A **$695.00**

Mainstay

VIP-C 2.0

Finally there's a C development environment that anyone can use. VIP-C is the fastest, easiest way to create complete, professional, stand-alone Macintosh and Power Macintosh applications—period. If you're tired of juggling editors, interface design tools, debuggers, and compilers, or intimidated by the myriad development tools you need to get started, end your search for development utopia here. VIP-C gives you everything you need in one box, at a price anyone can afford. And with VIP-C you program the way you want. Work in a traditional bottom-up approach, or design your program's interface first with a powerful, integrated Form editor—complete with plug-in control modules. Because your program is in standard ANSI C, it's portable and completely compatible with other past, present, and future C development environments.

Requirements

Power Macintosh, Macintosh, or Mac OS-compatible computer with a 68030 or greater processor; 4 MB RAM (8 MB RAM recommended); 12 MB hard disk space; System 7 or later.

T0822LL/B **$395.00**

Mainstay

VIP-BASIC 2.0

Finally, a professional BASIC development environment for the Macintosh! VIP-BASIC is the ultimate BASIC environment for creating complete, professional, stand-alone Macintosh and native Power Macintosh applications! VIP-BASIC even converts your BASIC code to ANSI standard C for easy portability to other systems. VIP-BASIC gives you everything you need in one box, at a price anyone can afford. And with VIP-BASIC you program the way you want. Work in a traditional bottom-up approach, or design your program's interface first with a powerful, integrated Form editor—complete with plug-in control modules. For the novice Macintosh programmer and the neglected BASIC user, this program is a must-have. Breathe some life into those old BASIC files you created years ago, and watch them scream as Power Macintosh native applications. Buy VIP-BASIC today!

Requirements

Power Macintosh, Macintosh, or Mac OS-compatible with a 68030 or greater processor; 4 MB RAM (8 MB RAM recommended); 12 MB hard disk space; System 7 or later.

T1577LL/A **$295.00**

ACI US, Inc.

Object Master 3.0 Universal

Object Master is an innovative programming environment that provides all the necessary tools to write, organize, and navigate through source code and speed the development of C/C++ programming. Object Master is available for both Macintosh and Windows, and allows you to use the same project interchangeably across both platforms. Object Master supports C and C++ programming languages and works seamlessly with all major compilation systems.

Object Master also parses code, checks syntax in real-time, and maintains a dynamic data dictionary of components. It includes industrial-strength browser windows, graphical class tree windows, a sophisticated source code editor, and parser.

Requirements

Macintosh or Mac OS-compatible computer with a 68030 or greater processor; 2MB RAM; 2MB of hard disk space; System 6.0.5 or later.

T0601LL/D **$249.00**

Orders are shipped within 24 hours. **Order Toll-free Monday through Friday, 7am-5pm, PST.** U.S.: **1-800-282-2732**

Jasik Designs

The Debugger V2 & MacNosy Universal Version

This is the debugger of choice for many major Macintosh developers.

Features

- The Debugger, used for debugging of both 680x0 and Native PowerPC programs
- CoverTest, a program to determine code coverage for QA testing
- MacNosy, a powerful global decompiler
- Source-level debugging for Metrowerks and MPW programs, THINK C projects, OpenDoc parts and CFM Libraries

Other features include high-level symbolic debugging of arbitrary programs or resources (XCMDs, 4-D Externals, etc.) and the ROM, disassembly, viewing of registers, memory, the heap, the stack, global variables, trap, and user call parameters.

Product ships on CD-ROM and includes a Multimedia Training Tutorial.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 1.5 MB RAM; 2 MB hard disk space; System 6.0.5 or later; CD-ROM drive.

T0123LL/A **$350.00**

Apple Computer, Inc.

MacsBug

Included in E·T·O Included in Developer Mailing

This useful assembly-level debugger offers power, expandability, reliability, and compatibility with System 7. The reference manual includes a wealth of debugging tips and techniques.

Special User Notes

High-level languages, such as C or Pascal, may require the use of a source-level debugger, such as SourceBug.

Requirements

Power Macintosh, Macintosh, or Mac OS-compatible computer with a 68030 or greater processor; 800 KB RAM; 8 MB hard disk space; System 7 or later.

R0064LL/D **$34.95**

Apple Computer, Inc.

ResEdit

Included in E·T·O Included in Developer Mailing

This graphical resource editor lets you create and edit elements of the Macintosh user interface such as menus, windows, icons, dialog boxes, and other standard data structures. Macintosh programmers and advanced users can quickly create portions of their application's user interface as well as modify an existing interface.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 500 KB RAM; 800 KB hard disk space; System 6.0.2 or later.

M0910LL/D **$29.95**

Onyx Technology

QC 1.2

QC is a stress-testing tool that checks code during runtime for a wide variety of serious errors. With QC many intermittent errors are instantly reproducible. There are over 15 stressful tests including heap check, purge, scramble, handle/pointer validation, dispose/release checks, write to zero, dereference zero, free memory invalidation, and block bounds (overrun) checking. QC is extremely easy to use and sports an API for programmers who want precise control over testing. It already is used by many leading software companies. This version is PowerPC native.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 4 MB RAM; 2 MB hard disk space; System 7 or later.

T1874Z/A **$99.00**

Segue Software, Inc.

QA Partner 3.0 Automated Testing System

Segue's QA Partner for the Macintosh is the only automated software testing solution—object-oriented, language-based, and GUI-aware—that employs an easy-to-use, intuitive, logical testing approach to deal with complex client/server applications.

Features

- Create effective automated tests.
- Begin testing at any phase of the application's lifecycle.
- Plan and manage the testing process.
- Easily maintain tests to reflect application changes.

- Reuse the same test across multiple releases, more than 25 platforms and operating systems.
- Achieve true unattended testing.
- One year free support and maintenance from manufacturer.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 1 MB RAM; 5 MB hard disk space; System 7 or later.

T1877Z/A **$3,560.00**

Casady & Greene, Inc.

Conflict Catcher 3

Accelerated for Power Macintosh

The industry standard in startup file management and conflict identification, Conflict Catcher 3 manages extensions, control panels, System Folder extensions, Apple menu items and fonts. For developers, system/hardware reports can include all the hexadecimal code of system traps of startup files listed by either file or trap name.

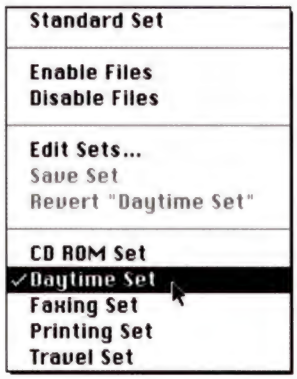
Features

- Identifies startup file conflicts
- Reduces Beta cycle delays
- Enhanced link and set features
- Scans for damaged resources
- System 7 native/savvy

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 512 KB RAM; 400 KB hard disk space; System 7 or later.

T1680LL/A **$64.95**



Bare Bones Software, Inc.

BBEdit 3.5

Accelerated for Power Macintosh

BBEdit 3.5 is the popular and critically acclaimed text editor for use by HTML authors, programmers, and anyone else who needs plain text editing and manipulation with maximum performance and useability. Its integrated HTML editing tools have made it the weapon of choice for HTML authors and Webmasters all over the world, and its power and ease-of-use make it suitable for anyone from novice to professional.

Features

- Internet Config system is supported to manage interaction with Internet tools such as Web browsers and ftp clients.
- Native PowerPC code speeds editing, searching and transformation of text files.
- HTML tools (included) speed the composition of home pages and other WWW content.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 730 KB RAM; 2 MB hard disk space; System 7 or later (System 7.5 recommended); CD-ROM drive.

T1545LL/D **$99.00**

Apple Computer, Inc.

Chinese Language Kit 1.1.1

Included in DEVELOPER MAILING

The Apple Chinese Language Kit contains everything you need to easily add Chinese characters to your documents. This language kit supports both simplified and traditional characters and contains a wide variety of Chinese input methods. The included TrueType fonts are fully scalable and can be printed on any Macintosh-compatible printer.

Features

- Includes two TrueType fonts, plus four additional fonts on CD-ROM
- Supports both simplified and traditional Chinese text entry, editing, and printing

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 5 MB RAM; 8MB RAM for Power Macintosh; 10 MB hard disk space (17 MB recommended); System 7.1 or later; one or more applications that support WorldScript or that have been localized for Chinese.

M2368Z/C (U.S./Int'l) **$189.00**

M2368JA/C (Japan) **$189.00**

Apple Computer, Inc.

Japanese Language Kit 1.2

Included in DEVELOPER MAILING

The Apple Japanese Language Kit contains everything you need to create, edit, and print documents in Japanese. You can also use the kit to work with files created using KanjiTalk, the Japanese version of the Apple Macintosh operating system, or to run Japanese applications on your Macintosh computer.

Features

- Japanese text entry, editing, and printing
- Kanji TrueType fonts for high-quality printing

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 5 MB RAM; 8MB RAM for Power Macintosh; 30 MB hard disk space; System 7.1 or later; one or more applications that support WorldScript or that have been localized for Japanese.

M1648Z/C (Int'l) **$189.00**

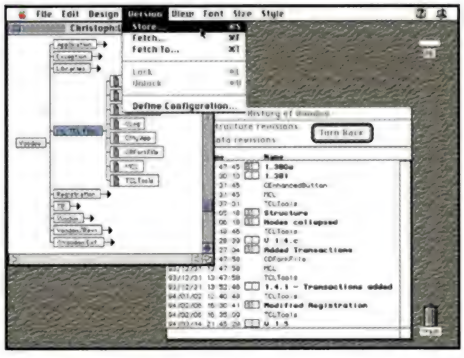
Orders are shipped within 24 hours. **Order Toll-free Monday through Friday, 7am-5pm, PST.** U.S.: **1-800-282-2732**

Uni Software Plus GMBH

VOODOO 1.7

NEW VERSION

VOODOO is the ultimate version control solution you have been waiting for for a long time. It is a stand-alone version control tool with a neat graphical user interface offering many features for the simple and clear management of projects in which files evolve in numerous versions. VOODOO manages not only variants and revisions of single files, but also of entire software projects (multiple files, multi-



ple users, multiple variants, access rights, project structure, project history, etc.). VOODOO uses delta storage with amazing compression rates of about 95% (up to 99%). It is not restricted to text files but works for files of arbitrary type (desktop publishing documents, databases, libraries, applications, etc.). VOODOO is suitable for small (one person) projects up to large projects with many developers. A flexible locking mechanism ensures data integrity when several developers work on the same project.

Features

- Stand-alone tool with graphical user interface
- Simple and clear management of variants and revisions of entire projects (not only single files)
- Efficient delta storage (95% savings and more) for files of arbitrary type (MSWord, Quark XPress, Filemaker Pro, 4th Dimension, etc.)
- Administrate users with hierarchical access rights
- Recording of the complete project history (who made which changes, when, and why)
- Suitable for all sorts of projects (software development, documentation, design, CAD, etc.)

Enhancements in Version 1.7:

- Drag-and-Drop support enables easy integration with other tools
- Locking of files using the Finder's "Locked" flag
- Improved delta algorithm: (up to six times faster, uses temporary memory)
- Printing of the project history supported

Requirements

Power Macintosh, Macintosh, or Mac OS-compatible computer with a 68000 or greater processor; 1 MB RAM; 600 KB hard disk space; System 6.0.4 or later.

Single License
T1750Z/B **$229.00**

2 pack
T1931Z/A **$359.00**

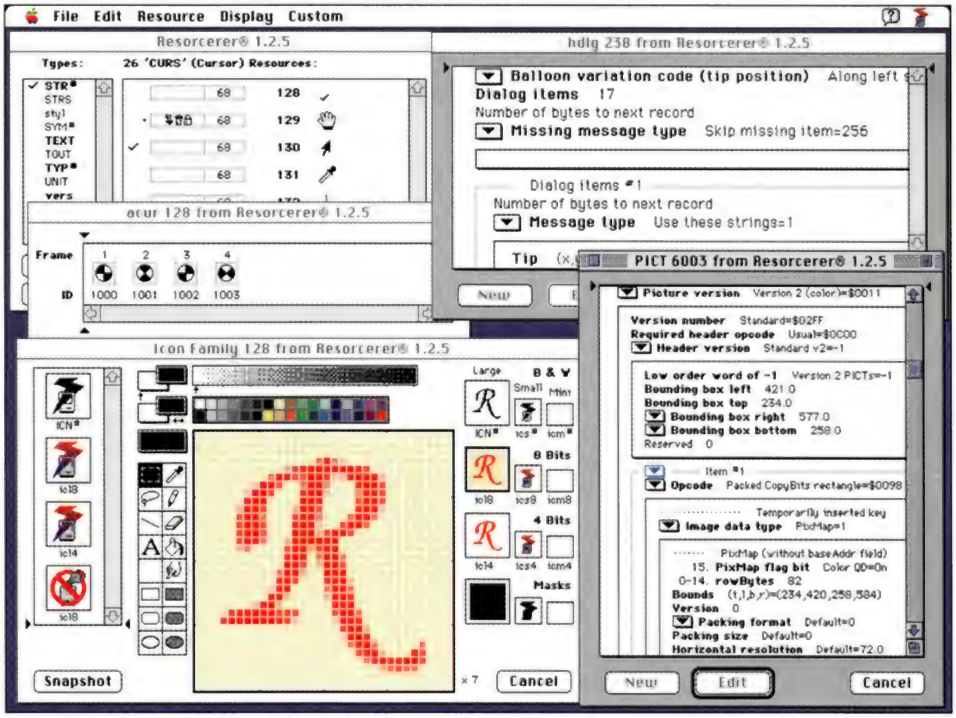
5 pack
T1932Z/A **$799.00**

Mathemæsthetics, Inc.

Resorcerer

Winner of the Eddy Award for Best New Developer Tool of 1993, Resorcerer is the resource editor for the Macintosh wizard. *MacUser* magazine called it "without a doubt, the premiere resource editor on the Mac."

Filled with time-saving features to make you more productive, Resorcerer lets you easily browse all resources using just one file window; search all resources for specific text matches; make global attribute changes, including changing resource



Relied upon by developers, interface designers, and localizers around the world, the award-winning Resorcerer is a powerful, 32-bit, safe, easy-to-use, and well-supported resource editor for Macintosh and Mac OS-compatible personal computers. Engineers at every major Macintosh software company now enjoy Resorcerer's superior benefits.

types, with full undo; build resource files from other resource files automatically; and lots, lots more. Dedicated editors for dialogs, menus, color icons, pictures, strings, and other standard resources all work smoothly and safely.

Whether you have to parse a picture, debug a data fork, design and try out Balloon Help, create anti-aliased icons, design and edit a custom resource with 40,000 fields, create C source code to run a dialog, find every reference to a control, change the structure of existing custom resources, or any of hundreds of other resource-related tasks, Resorcerer's magic will quickly save you time and money.

Features

- Hundreds of standard resource types supported
- 120 TMPL data field types
- File comparison, text and hex searching
- Editable clipboard, screen copying
- All editing safely done in private memory
- 500-page manual, free tech support from manufacturer

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 1.5 MB RAM; 1.5 MB hard disk space; System 6.0.5 or later. For educational discounts, call 1-303-440-0707.

T0437LL/A **$256.00**

Nisus Software, Inc.

QUED/M 2.7

QUED/M 2.7, the QUality EDitor with Macros, is the best choice for text editing on the Macintosh. Supporting the Symantec C++, CodeWarrior, THINK C, and MPW compilers and debuggers, QUED/M allows you to compile and build applications for these environments at the same time. Chances are you'll never have to leave QUED/M to develop your applications.

Features of QUED/M 2.7 include rectangular and noncontiguous selection, THINK reference and debugger support, GNU diff multi-file comparison, MPW projector awareness, PopUpFuncs support, MPW ToolServer support, unlimited undo and redo, text folding, automatic backup and save, and full macro language.

Requirements

Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 1 MB RAM; 1 MB hard disk space; System 7 or later.

T1720Z/A **$89.00**

Apple Computer, Inc.

Virtual User 2.0.1

Included in E·T·O

With this test automation system, a host Macintosh executes tests described in a high-level scripting language and performs them on targets. An interactive user interface allows each Macintosh under test to be controlled independently, so different applications happen simultaneously.

This is a stand-alone tool that does not require MPW and is compatible with Virtual User 1.x scripts. Version 2.0.1 is a bug fix release of the Virtual User 2.0 product and replaces version 2.0.

Requirements

Host: Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 4 MB RAM; 3 MB hard disk space; System 7 or later.
Target: Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 1 MB RAM (2 MB RAM recommended with System 7); 3 MB hard disk space; System 6.0.3 or later; an AppleTalk network connecting it to the host.

R0454LL/B **$79.00**

Apple Computer, Inc.

Apple Personal Diagnostics 1.1.3

Now there's an easier way to test the hardware and system software of Macintosh and Power Macintosh computers. Apple Personal Diagnostics is an integrated, easy-to-use software utility that checks and reports on the well-being of your computer. It performs comprehensive diagnostics tests on your system's logic board, hard drive, floppy drive, system software, and display. There's even a unique Automated Diagnostics feature that helps you identify potential problems before they become serious. Apple Personal Diagnostics supports more than 140 Macintosh models, from the Macintosh Plus through the Power Macintosh 9500/132.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 2 MB RAM; System 6.0.7 or later; (Automated Diagnostics requires version 7.0 or later).

M2800Z/C **$99.00**

Emerson Kennedy

PowerTap 3.0

PowerTap 3.0 is the hot new library that a host application uses to tap into the additional processors in new multi-processor Macintosh computers as well as tapping the power of networked computers.

It is easy to get 20 processors contributing to the same job. The host application programmer is spared the time and effort of designing sophisticated, optimized scheduling algorithms—PowerTap does all that. Simply divide the job into separate pieces, submit each to the library, and get results faster than ever.

The host application executes the same way, whether it is running on a single CPU machine or a network of multi-processor computers. This greatly simplifies writing host software that runs in a wide variety of computing environments.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 50 K RAM; 50 K hard disk space; System 6.0.7 or later.

2 Remotes
T1721Z/B **$1,200.00**

5 Remotes
T1734Z/B **$1,900.00**

Unlimited
T1739Z/B **$2,700.00**

Adianta, Inc.

The Memory Mine

The Memory Mine is a stand-alone tool for monitoring heaps and stress testing applications (Purge, Compact, and Zap, as well as on-the-fly memory allocation). It allows quick, non-intrusive identification of problems with memory allocation and memory architecture.

Heap corruption is flagged when it occurs; sixteen different tests for heap corruption are performed on each monitoring cycle. Memory leaks are seen as they occur. Heap data can be logged manually or automatically. Source code is not needed to monitor heaps, and no special set-up is required.

Requirements

Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 650 KB RAM; 320 KB hard disk space; System 7 or later.

T1781Z/A **$99.00**

Bowers Development Corp.

AppMaker CD 2.0b3

AppMaker makes it faster and easier to develop the user interface for a Macintosh application. Just point and click to design your application, then AppMaker creates resources and generates excellent source code.

AppMaker supports most development environments including Metrowerks CodeWarrior C or C++ with PowerPlant, Symantec C++ with TCL 2.0, THINK C , THINK Pascal, Metrowerks Pascal, Language Systems Pascal, and MPW C or C++ with MacApp 3.1. Add-on products support FORTRAN. The generated code uses Universal Headers to provide Power Macintosh compatibility.

Beginners use AppMaker to learn object-oriented and Macintosh Toolbox programming techniques; experts use it to increase productivity. It saves so much time, it's like having your own assistant programmer working for you.

One-year subscription on CD is included.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 3 MB RAM; 5 MB hard disk space; System 7 or later; Drag and drop; Color QuickDraw; CD-ROM drive needed for installation.

T0322LL/H **$299.00**

Orders are shipped within 24 hours. **Order Toll-free Monday through Friday, 7am-5pm, PST.** U.S.: **1-800-282-2732**

Allegiant Technologies, Inc.

Marionet 1.0

NEW PRODUCT

Marionet is the first complete, script-level interface to the Internet for the Macintosh. It gives developers and power users the ability to build custom Internet solutions using popular authoring tools or productivity applications by providing simple, English like commands for all major Internet protocols. Marionet takes care of all the complexity of communicating with the Internet.

Build custom Internet browsers and automation tools, or incorporate automated Internet access into existing products such as multimedia content, CBT, education, database front-ends — even popular productivity tools such as Claris FileMaker Pro.

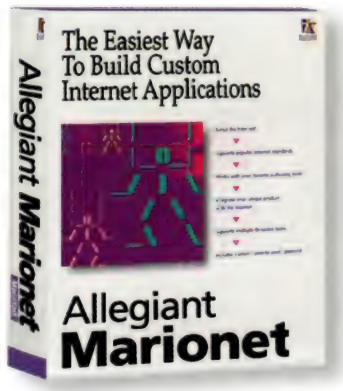
File Edit Go Tools Utilities Objects Text Windows Demos
Marionet™ Syntax Guide
Session Mail News FTP HTTP Gopher DNS Chat
Syntax Listings
News
News Commands: OpenNewsServer
Explanation: Opens a connection to the specified NNTP news server. Once opened, you may interact with the server as demonstrated on the following cards
Syntax: Marionet OpenNewsServer SessionID, URL
Examples: Marionet OpenNewsServer 2381757, http:\\www.allegiant.com
Session ID: MacWarehouse
URL: news2.cts.com
Proxy: Marionet OpenNewsServer "MacWarehouse", "news2.cts.com"
Try Url

Marionet works similarly to QuickTime. Simply put the Marionet file into your System folder, and it is available to any authoring tool that supports external commands (XCMDs) or any application that supports attachable AppleScripts. Marionet includes all necessary XCMDs, documentation and samples for use with SuperCard, HyperCard, FileMaker Pro, and any application that supports attachable AppleScripts or XCMDs.

Marionet supports all major Internet protocols: World Wide Web, newsgroups, e-mail, ftp, domain name service, and gopher. In addition, Marionet has its own protocol named "Chat" that allows you to build completely custom collaborative and workgroup solutions using the Internet as a worldwide network. Marionet works in both synchronous and asynchronous modes, and supports common security measures within its supported protocols.

Features

- Web page maintenance tools
- Automated link management and verification tools
- Search "agents"
- Automated newsreaders



- E-mail reading/distribution interfaces
- ftp utilities
- Workgroup and collaborative utilities
- Automated e-mail response systems
- ftp site maintenance tools
- Batch processing tools
- And much, much more

Requirements

Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 750 KB RAM ; 1–4 MB hard disk space; System 7.1 or later; and a TCP/IP connection to the Internet.

T1928Z/A **$99.00**

Apple Computer, Inc.

TCP/IP

Included in DEVELOPER MAILING

Macintosh computers can now communicate with other computers using industry-standard TCP/IP protocols with the addition of MacTCP, a component of the TCP/IP Connection Kit for Macintosh.

You can create TCP/IP applications for the Macintosh by using the MacTCP Developer's Kit, which contains object code libraries and associated files for C development. The MacTCP Developer's Kit is available on E.T.O. (see page 12).

Single-user packages include

- TCP/IP protocols implemented as drivers for the Macintosh operating system, so that multiple applications can access TCP/IP services simultaneously
- MacTCP stack and driver software
- MacSNMP Client
- Macintosh, TCP/IP and Network agents
- MIBs and TCP/IP Connection User's Guide

TCP/IP Administration for Macintosh contains the complete TCP/IP Connection product; MacTCP Admin and MacSNMP Admin software; MacTCP Administrator's Guide; MacSNMP Administrator's Guide; TCP/IP Administration; Overview and Installation; and the TCP/IP Connection User's Guide.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 2 MB RAM; System 7 or later. Installation and use of MacSNMP (included with TCP/IP Connection for Macintosh) requires at least 4 MB RAM and System 7 or later. Use of MacTCP on a LocalTalk network requires a DDP-IP gateway, such as Shiva Corporation FastPath 5 or a Cayman Systems GatorBox CS. Use of MacTCP on an Ethernet or Token Ring network requires a Macintosh computer with the appropriate network interface.

TCP/IP Connection for Macintosh 2.0.4

M8113Z/B **$59.00**

20-user license extension

This license extension contains no software.

M8115Z/B **$69.00**

TCP/IP Administration for Macintosh 2.0.4

M8114Z/B **$199.00**

Apple Computer, Inc.

Apple Internet Connection Kit

Apple Internet Connection Kit brings together all the applications you need to access the Internet directly. Chat with people around the world, exchange e-mail with more than 30 million users, visit World Wide Web sites, and download files right to your desktop. Take advantage of Internet resources and participate in a wide variety of electronic communities—all with the same full Internet access that major universities and corporations have. Registering with an Internet provider is easy—Apple's Internet Dialer application helps you sign up instantly. Apple Internet Connection Kit also provides all the help (via Apple Guide) and documentation you need to venture on-line, even if it's your first time.

The Apple Internet Connection Kit includes

Netscape Navigator, Apple Internet Dialer, Fetch, Anarchie, Claris em@iler Lite, NewsWatcher, Adobe Acrobat Reader, and Aladdin Stuffit Expander.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 8 MB RAM; 10 MB hard disk space; System 7.5 or later.

Single User

M4276LL/A *(U.S. only)* **$44.95**

20 User

M4503LL/A *(U.S. only)* **$699.00**

StarNine Technologies, Inc.

Accelerated for Power Macintosh

WebSTAR

Now you can create and serve your own World Wide Web site directly from your Macintosh! Within minutes, you'll be on the Internet or your internal Web serving your home page, graphics, and even QuickTime movies. WebSTAR can publish information stored in your 4th Dimension, Butler, or Claris FileMaker Pro database, and it's faster and more secure than many UNIX servers.

WebSTAR includes free ftp and Gopher servers, sample home pages, HTML editors, and lots of demo add-on software. Start serving your site today!

Features

- Four times faster than MacHTTP
- Includes free Internet Publisher CD-ROM
- Supports thousands of connections per hour
- Remote administration
- Faster and more secure than many UNIX servers

T1909LL/A *(U.S. only*)* **$499.00**

** Products are available through catalog to U.S. customers only. Customers located outside the U.S. should contact the manufacturer for resellers in their area.*

ListSTAR

ListSTAR broadcasts messages to customers and colleagues through mailing list discussion groups and E-Mail-On-Demand systems. Discussion groups allow you to sponsor e-mail lists to discuss ideas with people on the Internet or your internal network. E-Mail-On-Demand can be used to provide instant information, like Fax-On-Demand. An e-mail rules engine performs these automated services which once required a UNIX or mainframe computer. Make your Macintosh an e-mail hot-spot on the Internet!

ListSTAR is available in two versions: ListSTAR SMTP for a multi-threaded, high-performance e-mail engine, or ListSTAR POP for personal E-Mail-On-Demand services.

Features

- Automatically serves binary files, messages, or adds users to list
- Easy menu navigation of rules
- Works with WebSTAR for friendly Web interface
- FREE StarNine Internet Publisher CD-ROM
- Includes sample scripts
- Four configurations to match your network

ListSTAR SMTP
T1910LL/A *(U.S. only*)* **$499.00**

ListSTAR POP3
T1911LL/A *(U.S. only*)* **$199.00**

WebSTAR and ListSTAR SMTP Bundle
T1912LL/A *(U.S. only*)* **$959.00**

WebSTAR SSL Security Toolkit

WebSTAR SSL Security Toolkit adds authentication and encryption capabilities to a WebSTAR-based Web site. Using the SSL (Secure Sockets Layer) protocol, WebSTAR SSL Security Toolkit enables secure transactions between the WebSTAR SSL server and SSL-compliant web browsers.

Features

- Enables encrypted transactions for online commerce
- Includes set-up utility to help create public/private keypairs and register digital IDs
- Support for industry standard SSL security protocol

Note

Requires digital ID registration through Verisign Corp.

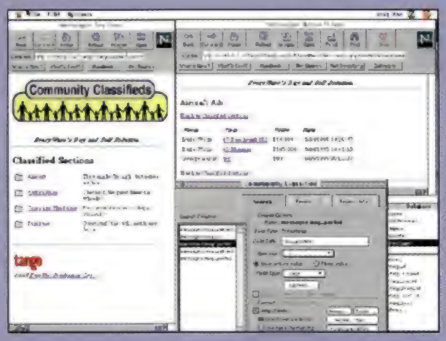
T1913LL/A **$995.00**

Requirements

Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 4 MB RAM; 1.5 MB hard disk space; System 7 or later; MacTCP (provided); TCP/IP connection to Internet or LAN.

Try This!

Add Database Functionality to Your Web Site



Take your Web site to new levels with a database backend that uses forms for search queries and data entry, and templates for on-the-fly result display. The Butler SQL/Tango bundle can integrate a relational database into your existing site without creating custom Common Gateway Interfaces (CGIs).

1. First, create a database using the relational features of Butler SQL. More than 50 industry standard applications can make use of Butler SQL's superior client/server features and performance.
2. Next, use Tango for database to Web server connectivity. Tango is comprised of two products, the Tango CGI and the Tango Editor. Tango CGI links a Web server to a SQL database, and Tango Editor is the graphical development environment used to create query documents.
3. Tango's Query Builders let you quickly and easily create interfaces to search, insert, update, and delete records, all without having to write any of the HTML or SQL code—Tango does it all for you.

   The Search Query Builder allows you to create simple search pages by just dragging and dropping search columns from the database to the builder. You have full control over how the pages are formatted and how the columns are searched. Any place forms are used, Tango Editor lets you select from the following form field types: text, check box, pop-up menu, selection list, and radio buttons.

   The New Record Query Builder allows you to create data entry Web pages just as easily. Drag in the entry columns, choose a formatting style, mark appropriate columns as required, and enter a result message. It's that easy!

   Plus, Tango has the functionality to go beyond simple queries. With query documents you can include custom SQL procedure calls to perform more advanced data processing. You can even call other applications via Apple events to perform functions such as credit card authorization.
4. Finally, create result templates that will be used to display the information returned by a query. The format of the database results is completely customizable, with both standard HTML formatting and special HTML meta-tags for database columns, variables, and other elements.
5. The different Tango elements you have created can be integrated into your Web site using tools such as Adobe PageMill and SiteMill.

Nisus Software Inc.

Nisus Writer 4.1

Well known for core text processing and graphics features, Nisus Writer 4.1 includes unlimited undos, noncontiguous selection, customizable keyboard menu equivalents, complete graphics creation, and an especially powerful macro language for automating repetitive tasks.

Nisus Writer 4.1 introduces multimedia capability, making it practical to produce true multimedia, multilingual documents for tasks like proof reading or on-the-job training. New features include HTML Authoring Tools for Internet publishing, recorded Sound Annotation, Text-to-Speech in five languages, Publish and Subscribe, QuickTime, Apple events, Frontier Scripting, and PowerTalk. As an added value, the Nisus Writer 4.1 package contains special versions of Tycho Tablemaker and the full MathType Equation Editor, which are accessible from within Nisus Writer.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 1.7 MB RAM; 2.5 MB hard disk space; System 7 or later.

T1873Z/A **$129.00**

Adobe Systems, Inc.

Adobe PageMill 1.0

Adobe PageMill 1.0 Web page authoring software addresses the needs of non-technical people who want to create or maintain content on the Web. You write your pages in what looks and feels like a normal word processor—only this one knows about the Web. Your pages show up exactly as they would in a Web browser. Creating links is easy. The built-in Preview Browse mode even lets you test your pages without leaving the program.

Features

- Edit Web pages directly, without ever seeing HTML
- Test pages with the integrated Preview Browser
- Create links without typing URLs or path names
- Insert and manipulate images within the same program
- Create forms by dragging and dropping
- Keep frequently used elements in a multi-page pasteboard

Requirements

Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 3 MB RAM (4.5 MB for Power Macintosh); 3 MB hard disk space; System 7.1 or later; color display.

T1814Z/A **$149.00**

Adobe Systems, Inc.

Adobe SiteMill 1.0

Adobe makes Web publishing productive, powerful, and easy. Adobe SiteMill maintains correct links for a web site, automatically repairing all links so that they point to the correct location. It completes, in seconds, a task that would take hours for a larger site—and without any user intervention.

Features

- Shows resources, page titles, and folders using Site View
- Shows warnings for unreachable or unused resources
- Fixes links automatically
- Enables link creation
- Shows bad links, and allows one-step correction using Error View
- Shows references to external Web sites, and allows global renaming of external links using External View

Requirements

Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 3 MB RAM (4.5 MB for Power Macintosh); 3 MB hard disk space; System 7 or later; color display.

T1828Z/A **$595.00**

EveryWare Development Corp.

Butler SQL 1.5.6 and Tango 1.0 Bundle

Do you want the most accessible client/server SQL database for the Macintosh at the most competitive price in the marketplace today? Do you want to integrate a powerful relational database in your World Wide Web solutions, without having to write custom CGI's in C/C++, PERL, or AppleScript?

Butler SQL is the most accessible database server for the Macintosh and Power Macintosh. More than 50 industry-standard applications can make use of Butler SQL's superior client/server database features and performance.

Tango is today's most powerful World Wide Web/database integration tool. With its easy-to-use graphical user interface, you can create complex Web solutions without having to write custom CGIs.

Features

- Client/server SQL RDBMS back-end
- Industry standard API (DAM & ODBC)
- Unlimited users per server
- Supports BLOBS (PICTs, QuickTime movies, etc.)
- Transaction processing (full COMMIT/ROLLBACK, RESTORE)
- Accessibility, scalability and flexibility

Requirements

Power Macintosh, Macintosh, or Mac OS-compatible computer with a 68020 or greater processor; 4 MB RAM; 4 MB hard disk space; System 7.5 or later.

2 user Bundle
T1830Z/A **$495.00**

5 user Bundle
T1896Z/A **$995.00**

10 user Bundle
T1897Z/A **$1,495.00**

Unlimited users
T1898Z/A **$2,295.00**

FOR MORE INFORMATION ABOUT

ROASTER

THE FIRST JAVA DEVELOPMENT ENVIRONMENT FOR MACINTOSH

SEE PAGE 18

Books and References

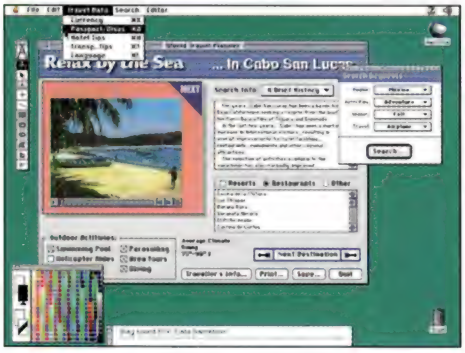
For books and references in the Internet category, see page 54.

Allegiant Technologies, Inc.

SuperCard 2.5

Accelerated for Power Macintosh

SuperCard 2.5 is the professional's choice for authoring and delivering interactive multimedia content and custom applications. It is ideal for creating computer-based training and education projects, authoring applications and CD-ROM titles, developing multimedia brochures, and more.



SuperCard uses an easy-to-grasp scripting language that rewards your learning with the extraordinary power to create "double-clickable" stand-alone applications.

Features include 24-bit color, customizable transitions effects, QuickTime "Hot Spots" and VR support, backdrop windows, enhanced memory management, enhanced project security, more than 40 new scripting enhancements, and more.

SuperCard offers direct script control over all objects: paint and draw graphics, menus, windows, sounds, QuickTime movies, even Director animations. It automatically converts HyperCard stacks to SuperCard projects.

Features

- 24-bit Color Support
- Enhanced QuickTime Capabilities
- Transition Effects
- Backdrop Window
- Sound Termination
- Script Insertion
- Object-based Memory Testing
- Environment Functions
- Expanded Menu Support
- New Runtime Editing Features

Requirements

Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 2MB RAM for black and white applications; 4MB RAM for color applications; 10 MB hard disk space; System 7.0 or later (System 7.1 or later required for text-to-speech; QuickTime 2.0 or later required for playing movies).

SuperCard 2.5
T1594LL/C

REDUCED PRICE!

~~$399.00~~
$299.00

Buy SuperCard 2.5 Now

and get everything you need for multimedia—free! VideoShop, LogoMotion, AudioShop, Morph, and TextureScape—a $1000 value all on one CD-ROM, and at one special low price! See page 8 for ordering information.

Heizer Software

WindowScript

Accelerated for Power Macintosh

WindowScript is the ultimate tool for designing Macintosh user interfaces using HyperCard. In the past, each HyperCard stack and Macintosh application had its own distinctive interface objects. Now, WindowScript brings the true look and feel of the Macintosh interface to HyperCard.

Features

- AppleScript support
- All kinds of dialog boxes, windows and floating palettes
- Scrolling windows
- Scrolling lists of text, icons and pictures
- QuickTime movies—with or without controller
- Custom and standard menus and popups
- Color pictures, including scrolling pictures
- Icons, including color and Finder icons
- Text fields with mixed fonts, styles, sizes, even color and group text
- Standard radio, checkbox, and round rectangular buttons
- Graphic tools for drawing lines and boxes

Requirements

Macintosh or Mac OS-compatible computer with a 68030 or greater processor; 2 MB RAM; 2 MB hard disk space; System 6.0.5 or later.

T1530LL/A **$149.00**

Heizer Software

Double-XX

If you're looking to move beyond XCMDs and XFCNs, Double-XX lets you build stand-alone utilities, Apple event servers, application prototypes, front end applications and more.

Developed by the author of CompileIt!, Tom Pittman, Double-XX is an application shell with a HyperTalk interpreter.

Requirements

Macintosh or Mac OS-compatible computer with a 68030 or greater processor; 2 MB RAM; 2 MB hard disk space; System 6.0.5 or later. Applications created with Double-XX do not require HyperCard.

T1531LL/A **$149.00**

SAVE

With our Double-XX, WindowScript and CompileIt! Bundle.

T1528LLA
$347.00

Heizer Software

CompileIt!

CompileIt!, the first HyperTalk compiler, is a complete development system for the creation of XCMDs and XFCNs.

USE SUPERCARD WITH COMPILEIT!

to compile SuperTalk scripts into fast XCMDs.

Features

- Expand the capabilities of your environment by using CompileIt! and the ROM Toolbox extensions.
- Increase the speed of routines written in HyperTalk by turning scripts into externals.
- Protect sensitive code from prying eyes because your code is now compiled.
- Easily learn Macintosh programming by exploring the ROM Toolbox.

It includes DebugIt!—a valuable source-level debugger for externals created with CompileIt!

Requirements

Macintosh or Mac OS-compatible computer with a 68030 or greater processor; 1 MB RAM; 2 MB hard disk space; System 6.0.5 or later.

T1529LL/A **$149.00**

Novell, Inc.

AppWare 1.2

If you're a corporate or commercial software developer, AppWare is the rapid application development tool you need. AppWare is a fifth-generation-language (5GL) tool that enables you to graphically construct network applications using prebuilt software components.

You can easily build applications with database access, communications and multimedia capabilities, and an easy-to-use GUI. Just visually select and arrange the prebuilt software components called AppWare Loadable Modules (ALMs).

ALMs contain all the code you would normally write yourself, and they can be reused in other applications. ALMs can range from client/server connections and multimedia engines to accessing NetWare operating systems services such as a unified directory and telephony.

AppWare is available on the Macintosh and Microsoft Windows platforms. Applications you create can be easily ported from one platform to the other.

Requirements

Macintosh: Macintosh or Mac OS-compatible computer with a 68030 or greater processor; 6 MB RAM; 10 MB hard disk space; System 7 or later.

Windows: IBM or IBM-compatible computer with a 80386 or greater processor; 4 MB RAM; 13 MB hard disk space; Microsoft Windows 3.1 or later; CD-ROM drive.

T1738Z/A **$199.00**

Orders are shipped within 24 hours. **Order Toll-free Monday through Friday, 7am-5pm, PST.** U.S.: **1-800-282-2732**

Apple Computer, Inc.

HyperCard 2.3

Accelerated for Power Macintosh

HyperCard is an easy-to-use development tool for creating a wide range of custom software applications for the Macintosh. HyperCard organizes information into easy-to-use "stacks" of cards through which users can navigate and search for the information they need. Simply by clicking a button, you can view related text, see a graphic, hear a sound, or watch a QuickTime movie.

Used by commercial developers, consultants, in-house programmers and educators, HyperCard provides the flexibility to create all of the following applications: courseware, computer-based training simulations, database front ends, interactive multimedia presentations, information kiosks, and more.

HyperCard provides a robust prototyping and development environment for professional developers. It comes with powerful scripting tools (including AppleScript Runtime built-in), a modeless script editor, hypertext support, debugging tools, and other features to create powerful custom software. And, your HyperCard stacks can be saved as standalone, double-clickable applications that can be distributed without software royalty fees.

INCLUDED WITH HYPERCARD 2.3

APPLESCRIPT RUNTIME

Lets you run scripts on your own system with the System Software extension, standard scripting additions, the script editor and scriptable test editor.

Features

- Accelerated for Power Macintosh
- New 24-bit color painting tools for creating your own color graphics
- Automated Button Tasks that let you navigate between cards, add QuickTime movies, graphics, and sounds to your stacks. No scripting required.
- Read text out loud in various voices via PlainTalk
- Multimedia Utilities Bundle provides value-added tools for morphing, editing QuickTime movies, and more.

Requirements

- *Power Macintosh, Macintosh, or Mac OS-compatible computer with a 68000 or greater processor; QuickTime Tools require a 68020 or greater processor; Text-to-speech function requires a 68040 or greater processor.*
- *At least 2MB of RAM required for HyperCard 2.3; 4MB of RAM required for System 7.0 or later, QuickTime Tools, and AppleScript; at least 5MB of RAM is recommended when using Color Painting Tools.*
- *12 MB hard disk space.*
- *System 6.0.5 or later; System 6.0.7 required for Color Tools ; System 7.1 or later required for AppleScript, HyperCard Button Tasks, and the Standalone Application builder.*
- *QuickTime Tools requires the QuickTime system extension; Text to Speech function requires PlainTalk software (included).*
- *Multilingual HyperCard applications may require WorldScript software and/or international versions of AppleScript software.*

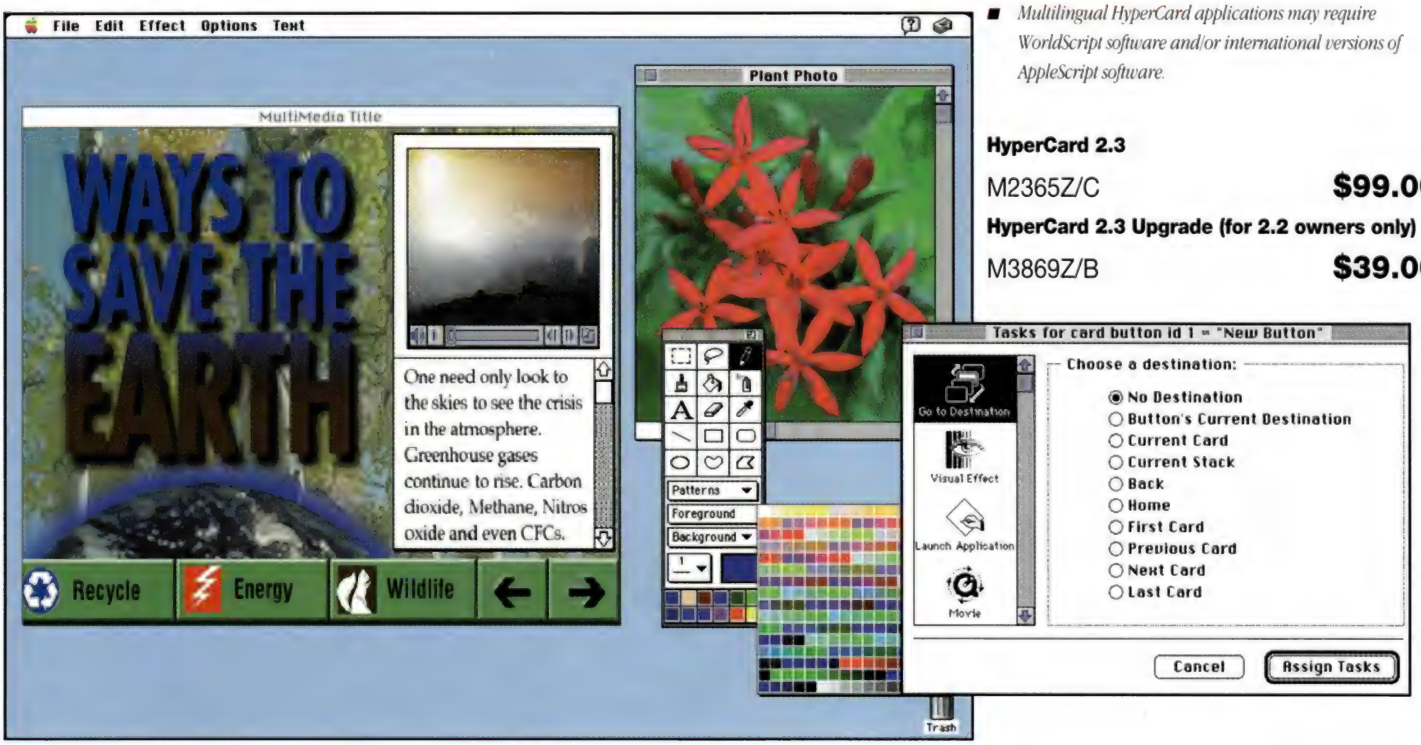
SAVE

WITH OUR HYPERCARD AND WINDOWSCRIPT BUNDLE.

Add the true look and feel of the Macintosh interface to your HyperCard stacks with WindowScript.

B2415LL/A

$189.00



HyperCard 2.3

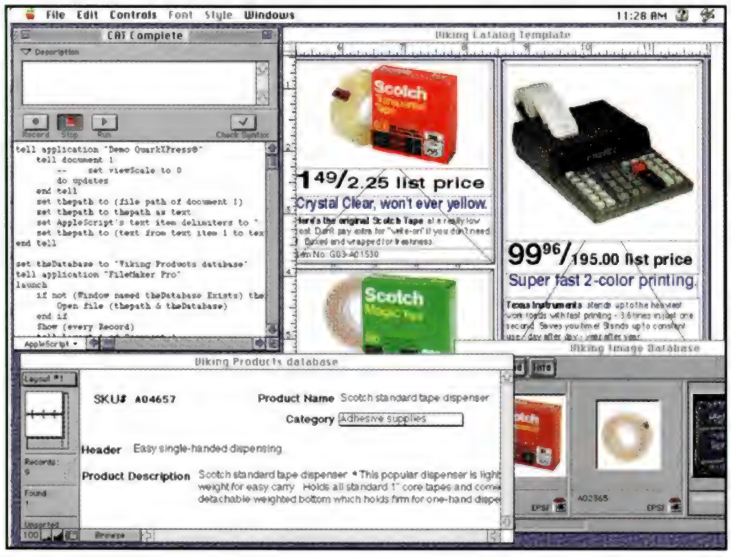
M2365Z/C **$99.00**

HyperCard 2.3 Upgrade (for 2.2 owners only)

M3869Z/B **$39.00**

Apple Computer, Inc.

AppleScript Software Development Toolkit 1.1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11:28 AM
CAT Complete
Biking Catalog Template
149/2.25 list price
Crystal Clear, won't ever yellow.
99 96/195.00 list price
Super fast 2-color printing.
Biking Products database
SKU# A04657
Product Name Scotch standard tape dispenser
Category Adhesive supplies
Header Easy single-handed dispensing
Product Description Scotch standard tape dispenser • This popular dispenser is light weight for easy carry. Holds all standard 1" core tapes and comes detachable weighted bottom which holds firm for one-hand dispe
Biking Image Database

Included in DEVELOPER MAILING

This is the complete AppleScript package for commercial developers who want to make their applications scriptable. By building AppleScript support into your applications, you increase the value of your product to your installed base of customers. Users can customize your application for their specific needs and can generate scripts simply by recording user actions.

The AppleScript Software Development Toolkit includes the following components:

- AppleScript language, system software extension, and script editor
- FaceSpan 1.0, the interface processor from Software Designs Unlimited Inc. which provides the look and feel of professionally engineered Macintosh applications
- Development tools, sample code, and electronic documentation on CD
- Finder Scripting software that lets you control standard Finder operations
- Developer's redistribution license for AppleScript System software extension and FaceSpan runtime code

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 4 MB RAM; 5 MB hard drive space; System 7 or later; and a CD-ROM drive.

REDUCED PRICE!

R0175Z/C **~~$99.00~~ $49.00**

Books and References

For books and references in the Solutions category, see page 55.

Software Designs Unlimited, Inc.

FaceSpan 2.0.1

Accelerated for Power Macintosh

FaceSpan 2.0.1 is an extensible Rapid Application Designer—a significant upgrade of version 1.0, the interface builder that ships with the AppleScript Developer's Kits.

Design simple or sophisticated applications with professional-quality interfaces using the standard Macintosh look and feel—or develop your own interface.

FaceSpan 2.0.1 creates focused solutions by combining high-powered interface elements with the power of AppleScript or any OSA language.

You can integrate scriptable applications such as Excel, FileMaker, FoxPro, Great Plains Dynamics, QuarkXPress, HyperCard, SAS JMP, and Pagemaker.

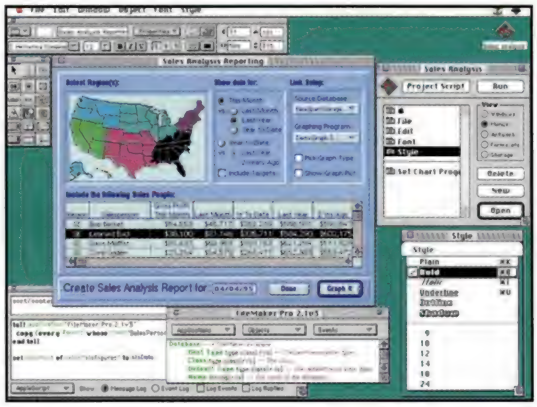
Your FaceSpan applications can include any number of windows, dialogues, and menus; in them display multi-column tables, scrolling lists, movies, pop-up menus, icons, and more. You can even program custom objects using Pascal or C.

Help your customers be productive faster; conserve your development time while dragging and dropping the functionality that your clients are looking for.

FaceSpan was a finalist for the 1995 *MacUser* Eddy award for Best New Utility. *Macworld* magazine (Nov. '95) said, "No scripter's workshop should be without FaceSpan." *MacUser* (UK edition) writes, "FaceSpan is a joy to use and shows how powerful AppleScript is… Buy a copy now."

Features

- Integrate any of over 300 scriptable applications
- Prototype any type of application at any level of detail
- Produce stand-alone applications
- Receive definitive documentation, tutorials, 50 examples, and royalty-free run-time license with 2.0.1



Requirements

Power Macintosh, Macintosh, or Mac OS-compatible computer with a 68020 or greater processor; 1.5 MB RAM (8 MB recommended); 7 MB hard drive space; System 7.0.1; AppleScript 1.1 (included).

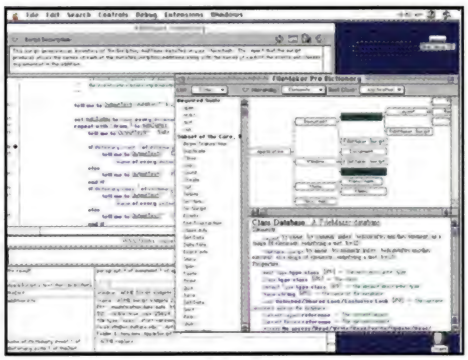
T1719Z/A **$199.00**

Orders are shipped within 24 hours. **Order Toll-free Monday through Friday, 7am-5pm, PST.** U.S.: **1-800-282-2732**

Late Night Software Ltd.

Script Debugger 1.0

Script Debugger is a powerful and flexible AppleScript authoring tool that makes it easy for novice and experienced script writers to get the most from AppleScript. With a dictionary browser second to none, Script Debugger offers more than 30 features including:



- True single-step execution of all AppleScript scripts
- A powerful scripting environment that includes Drag and Drop editing
- PowerPC Native
- Fully scriptable and attachable

As a bonus, you receive two valuable pieces of software with your Script Debugger purchase—the *LNS Scripting Additions,* a collection of more than 70 new AppleScript commands, and *Scheduler,* a utility that allows you to launch scripts at pre-determined times.

Requirements

Power Macintosh, Macintosh, or Mac OS-compatible computer with a 68020 or greater processor; 2 MB RAM; 3 MB hard disk space; System 7 or later; Color QuickDraw.

T1759Z/A **$129.00**

SPECIAL BUNDLE OFFER

*Get a complete AppleScript development environment for one low price—***AppleScript, Script Debugger, and FaceSpan.**

AppleScript *Software Development Toolkit is the cornerstone to script development, both for creating scripts and integrating scriptability into your applications.*

Script Debugger *gives you powerful editing and debugging functions, and helps you to understand the scripting interfaces of other applications.*

FaceSpan *lets you create user interfaces for your scripts, and integrates with Script Debugger for simplified editing.*

B2852LL/A

$299.00

Full Moon Software

ScriptWizard 1.5

ScriptWizard 1.5 is the latest version of the best-selling script editing and debugging tool for AppleScript.

ScriptWizard makes life easier for scripters by emphasizing features that speed script development. Some of the most significant enhancements to your productivity include the ability to single-step scripts (true statement-level stepping, with the currently executing line highlighted in the script editor window), watch property and global variable values as scripts execute, jump instantly to frequently used places in a script, find and replace text, use a menu shortcut to open frequently-referenced application Dictionaries, and browse a consolidated Dictionary of all installed scripting additions.

Other new features in version 1.5 include faster drag-and-drop text editing, and support for MPW Projector/SourceServer. The product is native for both 68K and PowerPC-based Macintosh computers.

Requirements

Power Macintosh, Macintosh, or Mac OS-compatible computer with a 68030 or greater processor; 2 MB RAM; 2 MB hard disk space; System 7.1 or later.

T1578LL/B **$89.00**

PreFab Software, Inc.

PreFab Player

PreFab Player is a faceless background application (similar to a system extension) that lets your scripts query and control otherwise non-scriptable applications, desk accessories, and control panels. Player adds verbs that directly manipulate the Macintosh user interface: choose from menus and pop-ups, select radio buttons, type text, determine the name of the frontmost window, the state of a checkbox, etc. Balloon Help identifies non-standard dialog items.

Player Runtime offers a simple, inexpensive way to distribute scripts and updates.

With Player, developers can now use a standard scripting system for automated testing; system managers and consultants can fill the gaps in corporate solutions; multimedia creators can batch process their favorite tools; and power users can automate tedious, dull, and time-consuming tasks.

Requirements

Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 300 KB RAM; 200 KB hard disk space; System 7 or later; AppleScript or Frontier.

T1876Z/A **$95.00**

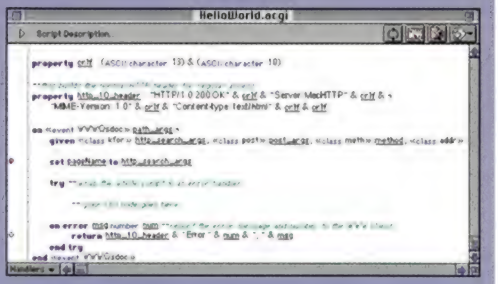
Note

Includes one Runtime license; additional Runtime licenses are $25 each and are available from the manufacturer.

Try This!

Simplify Common Gateway Interface Script Development

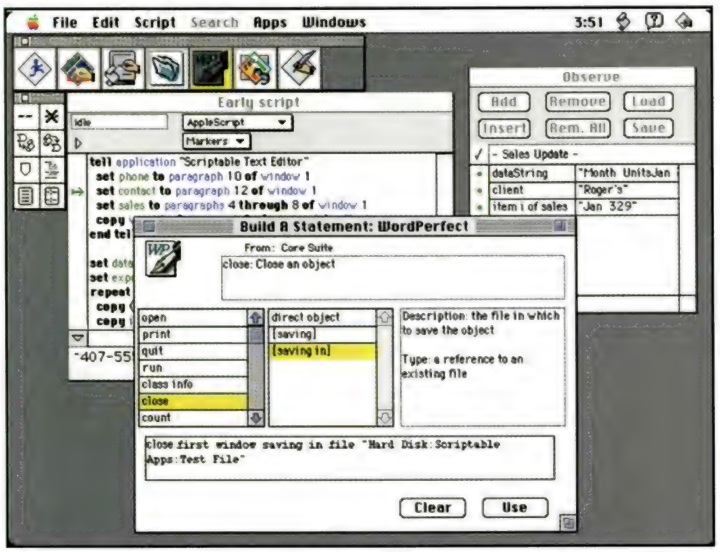
Use Script Debugger to directly manipulate AppleScript CGI scripts used by WebSTAR. This means you can develop and debug using real data provided by WebSTAR, instead of using test data in AppleScript, greatly simplifying the CGI script development process.



1. First, enable the "Send unhanded AEs to document" option in the Script Debugger preferences dialog box. This allows you to debug CGI AppleEvent handlers invoked by WebSTAR.
2. Then, open your CGI script with Script Debugger and set a breakpoint at the beginning of your CGI AppleEvent handler.
3. Configure your Web pages to direct CGI events to Script Debugger instead of the CGI script.
4. Now you can begin debugging by invoking the CGI script from your Web browser.

Main Event Software

Scripter 1.0.1



ing C code. The Scripter authoring and development environment will change the way you work with AppleScript.

Scripter has been used by individuals and corporate sites to produce major automation scenarios.

From expert script design to user-friendly editing and implementation, Scripter is the natural companion to AppleScript. Don't write scripts without it!

This authoring, debugging, and development environment is worthy of the power of AppleScript! Scripter, the Script Construction Set, is the foremost comprehensive environment for creating and debugging AppleScript scripts. Scripter is a shortcut to AppleScript's full capabilities that appeals to the novice and expert alike. Whether you're looking for a tool to introduce AppleScript capabilities or a well-crafted development environment, Scripter is the obvious choice.

Scripter combines script editing and building capabilities with new debugging features that are as powerful as they are easy to use. These capabilities have been carefully selected and crafted to work together with AppleScript to create a truly unique scripting experience.

Features

Here are highlights of Scripter's more than 40 capabilities:

- Engineered specifically for the AppleScript language: useful for multi-application scenarios; integrates with FaceSpan, HyperCard, and other applications
- Extended editing capabilities: drag-and-drop editing; six-function find-and-replace; navigation markers; script code library collection facility
- Superior access to application vocabularies: point-and-click assembly of commands and object specifications; command window for experimentation
- Shortcuts: many time-savers for faster scripting
- Debugging aids: variable watcher, expression evaluation, enhanced trace log, and real single-step debugging!

Scripter is unlike other scripting tools, which are either based on the original Script Editor concept or designed to look more like traditional programming tools. The designers of Scripter understood from the outset that scripting is different from writ-

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 8 MB RAM (12 MB or more recommended); 1 MB hard disk space; System 7 or later; and AppleScript.

T1668LL/A **$199.00**

SPECIAL BUNDLE OFFER

Buy the AppleScript Software Development Toolkit, Scripter, and FaceSpan together at a special price.

B2643Z/A

$347.00

XVT Software, Inc.

XVT Development Solution for C

XVT's Development Solution for C (DSC) offers a consistent C language programming interface for all popular windowing systems. The DSC implements this interface over native GUI functionality on each platform, and is fully internationalized. This approach ensures native look-and-feel, low overhead, interoperability with other applications, and access to native toolkits when required.

XVT DSC increases your productivity with an interactive GUI design, layout and prototyping tool. The interactive design tool generates C source code application resources, and make-files that are compatible with XVT's portable Application Programming Interface.

The XVT DSC supports GUI features such as windows, menus, controls, dialog boxes, and more, as well as platform-specific attributes and custom GUI objects.

Requirements

Macintosh: 68000 or greater processor; System 7.5; Symantec C++ 8.0, or MPW C++ 3.3.1; or Metrowerks CodeWarrior C/C++ 7.0.

Power Macintosh: PPC 601 or greater processor; System 7.5; Metrowerks CodeWarrior C/C++ 7.0.

XVT Developer Solution for C (Macintosh)
T1079LL/C **$2,325.00**

XVT Developer Solution for C (Power Mac)
T1685LL/A **$2,325.00**

XVT Software, Inc.

XVT Development Solution for C++

The XVT Development Solution for C++ (DSC++) is the streamlined, object-oriented application framework designed to make you more productive. Plus, it makes your applications portable to more GUI platforms than any other C++ solution.

In addition to an elegant object-oriented framework, it includes a visual development tool that graphically guides you through the entire application development process. This leverages the application framework to achieve accelerated production of code. What's more, the comprehensive DSC++ solution provides portability for your application, not just the GUI.

Requirements

Macintosh: 68000 or greater processor; System 7.5; Symantec C++ 8.0, or MPW C++ 3.3.1; or Metrowerks CodeWarrior C/C++ 7.0.

Power Macintosh: PPC 601 or greater processor; System 7.5; Metrowerks CodeWarrior C/C++ 7.0.

XVT Developer Solution for C++ (Macintosh)
T1080LL/C **$2,325.00**

XVT Developer Solution for C++ (Power Mac)
T1684LL/A **$2,325.00**

Apple Computer, Inc.

Oracle Power Objects 1.0

Oracle Power Objects software enables developers to deliver powerful client/server applications easier, faster, and with less coding than before, by combining the agility of visual programming environments with the robust data-handling capabilities of enterprise client/server tools. Applications are completely portable across Macintosh and Windows platforms so developers can deploy a single set of source code to an entire work group.

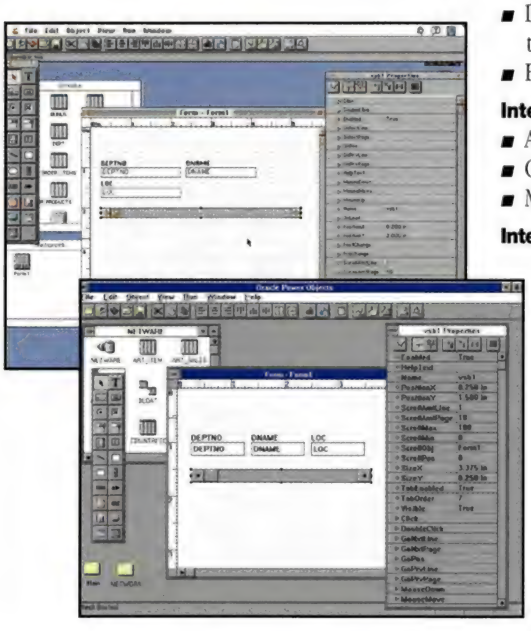
With Power Objects' Intelligent Data Management Architecture, you can create complex relational database functions visually, without coding. A "drag and drop" capability lets you move tables to a database server, propagate reusable components into multiple applications, copy databases from one server to another, and perform many other development functions with a click of the mouse. Power Objects provides the benefit of object-oriented programming—code reusability—in a way that non-programmers can master easily.

Versions of Power Objects are available for both individual and work group needs. Both the standalone and client/server packages include a compact SQL compliant local database.

Features

Visual application development
- Management of complex database functionality without coding
- Programming options selectable from sample property sheet

Ease of use
- Comprehensive drag and drop functionality
- Visual creation of reusable application components
- True multilevel inheritance



Cross-platform compatibility
- Support for Oracle and SQL Server databases *(Client/Server Edition only)*
- Macintosh and Windows deployment from same applications source code

Standards support
- BASIC language for scripting
- Drag-and-drop data migration from local SQL database
- Support for OLE, OCXs and DLLs

Database connectivity
- Native drivers for Oracle7 databases, Sybase SQL Server (version 4.2 or higher) databases, and Microsoft SQL Server (version 4.2 or higher) databases *(Client/Server edition only)*
- SQL compliant database

Integrated database session manager
- Create, modify, restructure, view and edit tables
- Create and modify table indexes and database views
- Create database sequence numbers
- Assign connection information

Integrated development environment
- Graphical application manager for displaying all application components
- Full support for OLE 2.0, OCXs and DLL calls under Windows 3
- Ability to create reusable application components directly in the product

Integrated graphical forms designer
- Property sheet that allows customization for components without codes
- Built-in tools for alignment and tab order
- Standard components for buttons, checkboxes, radio buttons, list boxes, combo boxes, graphics text fields and more
- Data-aware objects for data fields, repeater controls, scroll bars and more
- Extensibility through standard OCX controls

Integrated banded report writer
- Adaptive load balancing for any data size
- Custom group specifications
- Multilevel sorting

Integrated BASIC editor, debugger, and compiler
- Full graphical debugging
- Graphical object hierarchy diagram
- Conditional breakpoints and watchpoints
- Step-through, step-in, and step-over code execution tracing
- Evaluation and modification of expressions and variables

Oracle BASIC scripting language
- Same syntax as Microsoft Visual Basic
- Structured, object-oriented language
- Full support for inheritance, polymorphism, and encapsulation

Local database
- SQL compliant
- Support for compiled fields
- Support for outer joins and join expressions
- Binary field support for multimedia applications

Requirements

One of the following computer systems:
Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 12 MB RAM; 10 MB hard disk space; System 7.0 or later.
IBM PC or compatible computer with a 80386 or later processor (80486 recommended); 12 MB RAM; 10 MB disk space; Windows Version 3.1; .
For connection with remote databases:
*SQL*Net (any version 1, 1.8x through 2.0x)*
For connection to SQL Server databases:
On a Macintosh system, Sybase OpenClient/Server Release 10.02 for Macintosh
On a Windows System, Microsoft SQL Server 4.21 Client for Windows 8.1 or Sybase OpenClient/C for PC/MS Windows v.10.01.

Oracle Power Objects for Macintosh (special price good through 7/96)
M4417Z/A **$99.00**

Oracle Power Objects Client/Server Edition for Macintosh
M4419Z/A **$1,499.00**

Oracle Power Objects for Windows
M4418Z/A **$289.00**

Oracle Power Objects Client/Server Edition for Windows
M4421Z/A **$1,499.00**

With Adobe PageMill...

creating Web pages is as easy as using your favorite word processor!

Red lines indicate drag-and-drop capabilities
Insert form elements such as text fields and buttons
Instantly toggle between Edit and Preview Browse mode
To create a link, drag the page icon over the selected text
Products
Adobe PageMill
Simple
Solid
Page view lets you edit text and graphics directly, while built-in Preview Browse mode lets you follow links
Define your image hotspots using rectangle, circle, or polygon tools
Transparency tool
Multipage pasteboard frequently used text, graphics form elements, and links
Products
Image view for editing transparency, image file types, and creating image maps (linked hotspots)

Now you can create full-featured Web pages without having to know a thing about HTML and URLs. That's because Adobe PageMill software makes integrating text and graphics on a Web page—even linking pages themselves—as easy as using your favorite word processor. You can apply styles, and place and resize images, which PageMill automatically converts into the appropriate format. Then, drag and drop parts of your documents into other locations. What you see is truly what you get!

$149.00

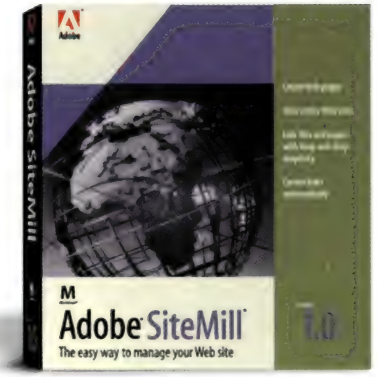
Adobe PageMill produces output that works with any Web server and browser. And creating links is easy: simply drag a page icon from one document and drop it into another. The program ensures that the links remain correct as you copy and paste them throughout your Web pages. The built-in Preview Browse mode even lets you test your pages without leaving the program.

With all these features, Adobe PageMill is the easiest way to create pages for the World Wide Web!

See page 25 for ordering information.

With Adobe SiteMill...

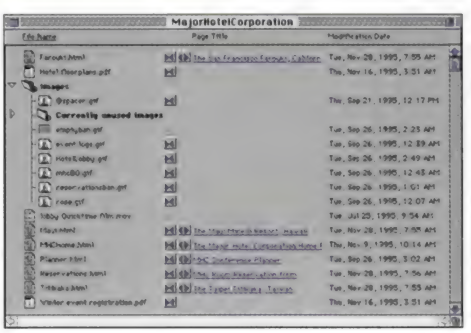
you can manage your entire Web site with ease!



Now you can maintain correct links for your entire Web site. Always. And automatically. With Adobe SiteMill software, whenever you paste a link, rename a file, or move a file between folders, the program automatically repairs all links so that they point to the correct location. In addition, Adobe SiteMill reads existing Web sites and automatically finds any errors—and then lets you fix them with a simple one-step procedure.

$595.00

After that, your site remains error-free! You can create new links by opening a file or an image in the Page view. There, you get all the functionality of Adobe PageMill software, including true, WYSIWYG page editing and integrated image manipulation and image format conversion. That means you don't have to know anything about URL link addressing schemes or page pathname syntax. You don't even have to type any filenames because Adobe SiteMill automatically creates the correct links.



With all these features, Adobe SiteMill is the easy way to manage your Web site!

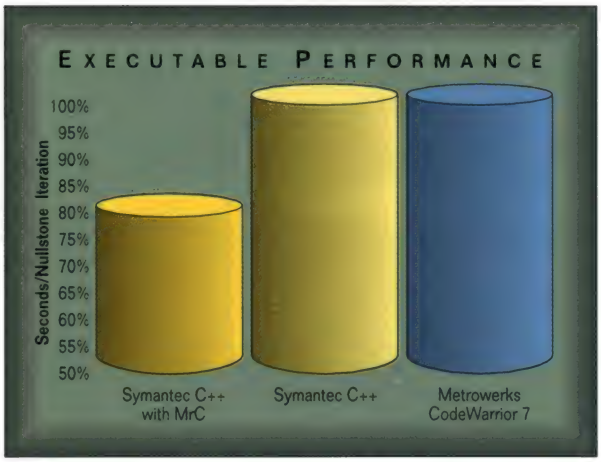
See page 25 for ordering information.

Adobe

Now, through a joint development agreement, Symantec and Apple® Computer let you produce the fastest Power Mac™ code.

Symantec C++ for Power Macintosh® now comes with MrC– Apple's new optimizing compiler.

Industry-standard Nullstone tests show that



*Code compiled using MrC runs an average of 22% faster than code compiled with the standard Symantec C++ compiler or Metrowerks Code Warrior 7™.**

text formatting–font, size and color. Organizing and navigating a project has never been easier.

In addition, Symantec C++'s multi-threaded environment gives you the ability to edit and write code while you compile. And our visual architect lets you quickly draw the interface. Corresponding code is then generated automatically.

All in all, Symantec C++ is a great way to develop the fastest applications for Power Mac.

WHEN MRC GOES TO WORK, SYMANTEC C++ APPLICATIONS GET 22% FASTER.

applications compiled with MrC run an average of 22% faster.

DEVELOP FASTER APPLICATIONS FASTER.

Not only can you develop the fastest Power Mac applications, you can write them fast, too. New AppleScript support lets you automate repetitive tasks. While the new linker provides fast turnaround for incremental builds.

With the fully integrated class browser, you'll quickly navigate your C++ class library. And support for templates and multiple inheritance further boosts your productivity.

ORGANIZE AND MANAGE PROJECTS EASILY.

The new Project Manager lets you organize and manage nested projects. You can display hierarchical groups as folders within a project window for easier organization.

The editor gives you unlimited split panes and full

MRC COMPILER
produces the fastest Power Mac applications

APPLESCRIPT
automates the build process

NEW INCREMENTAL LINKER
provides fast incremental builds

TEMPLATE AND MULTIPLE INHERITANCE SUPPORT
increases productivity

NESTED PROJECTS AND FOLDERS
let you organize and navigate projects

MULTI-THREADED ENVIRONMENT
lets you edit and write code while compiling

VISUAL ARCHITECT
builds your interface visually

THREE CDS FOR THE PRICE OF ONE.

When you register as a Symantec C++ owner, you'll be enrolled in the Symantec C++ Subscription for Macintosh program. Subscribers will automatically receive two free product updates (on CD ROM) so you'll always have the latest features and tools.

For ordering and pricing information, see Page 14.

SYMANTEC.®

Offer valid in U.S.A. only. *Industry standard Nullstone Tests run 9/29/95 on Power Mac 6100/60.

Symantec is a registered trademark of Symantec Corporation. All other trademarks are the property of their respective holders. All rights reserved. © 1995 Symantec Corporation.

dtF Americas, Inc.

dtF/Mac 1.6 for SuperCard

dtF/Mac for SuperCard features SQL, full transaction control, integrated error recovery, client/server architecture, an editable SQL tutorial stack, table formatting/utility XCMDs, and high performance API additions for result table manipulation. Special XCMDs are provided to support seamless integration of dtF binary large objects within SuperCard.

With dtF's unique direct integration technology, the dtF database system is fully contained in your SuperCard stack, for double-clickable applications without additional drivers, extensions, or INITs. The API for dtF stand-alone and client/server versions is identical and all applications developed with dtF stand-alone are royalty-free. A separate ODBC driver is available.

Requirements

Server: Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 2 MB RAM; 5 MB hard disk space; System 7.0 or later; AppleTalk. Stand-alone: Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 512 KB RAM; 350 KB hard disk space; System 7.0 or later.

Stand-alone
T1821Z/B **$695.00**

Client/Server
T1822Z/B **$1595.00**

dtF Americas, Inc.

dtF/Mac 1.6 for Smalltalk Agents

dtF/Mac for SmalltalkAgents features SQL, full transaction control, integrated error recovery, and a client/server architecture. Delivered as an ECLT for SmalltalkAgents 2.x, the full dtF API can be accessed from SmalltalkAgents, enabling developers to deliver full-blown client/server database applications.

With dtF's unique direct integration technology, the dtF database system is fully contained in your SmalltalkAgents application enabling you to create double-clickable applications without additional drivers, extensions, or INITs. The API for dtF stand-alone and client/server versions is identical, and all applications developed with dtF stand-alone are royalty-free.

Requirements

Server: Macintosh or Mac OS-compatible with a 68020 or greater processor; 2 MB RAM; 5 MB hard disk space; System 7.0 or later; AppleTalk. Stand-alone: Macintosh or Mac OS-compatible with a 68000 or greater processor; 512 KB RAM; 350 KB hard disk space; System 7.0 or later.

Stand-alone
T1824Z/B **$695.00**

Client/Server
T1826Z/B **$1,595.00**

dtF Americas, Inc.

dtF/Mac 1.6 for C/C++

dtF is the high-performance SQL database system for Apple Macintosh. dtF/Mac for C/C++ features SQL, full transaction control, integrated error recovery, client/server architecture, a compact and easy-to-use API, MacApp, TCL, and PowerPlant sample source code. Separate A4-relative and FAR CODE/DATA libraries are available. dtF is the premier choice for developers who want to create high-powered database-centered applications with no performance trade-offs. Applications created with dtF are compact, requiring minimal hard disk space and run-time memory. With dtF's unique direct integration technology, the dtF database system is contained in your executable enabling you to create double-clickable applications without additional drivers, extensions, or INITs. The API for dtF stand-alone and client/server versions is identical, allowing a smooth upgrade from stand-alone to client/server database applications.

Requirements

Server: Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 2 MB RAM; 110 KB hard disk space; System 7 or later; AppleTalk.
Stand-alone: Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 512 KB RAM; 350 KB hard disk space.

Stand-alone
T1768Z/B **$695.00**

Client/Server
T1767Z/B **$1,595.00**

dtF Americas, Inc.

dtF/Mac 1.6 for HyperCard

dtF is the high-performance SQL database system for Macintosh. dtF/Mac for HyperCard features SQL, full transaction control, integrated error recovery, client/server architecture, an editable SQL tutorial stack, table formatting/utility XCMDs, and high-performance API additions for result table manipulation (complete result table/column). Applications created with dtF are compact, requiring minimal hard disk space and run-time memory. With dtF's unique direct integration technology, the dtF database system is fully contained in your HyperCard stack enabling you to create double-clickable applications without additional drivers, extensions, or INITs. The API for dtF stand-alone and client/server versions is identical, allowing a smooth upgrade from stand-alone to client/server database applications. A separate ODBC driver is available from the manufacturer.

Requirements

Server: Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 2 MB RAM; 110 KB hard disk space; System 7 or later; AppleTalk. Stand-alone: Macintosh with a 68000 or greater processor; 512 KB RAM; 350 KB hard disk space.

Stand-alone
T1819Z/B **$695.00**

Client/Server
T1820Z/B **$1,595.00**

Brio Technology, Inc.

DataEdit 2.1

DataEdit is a graphical desktop development system that enables extremely rapid construction of forms-based client/server applications for SQL databases. DataEdit includes a date entry forms-building program with a built-in SQL generator and a centralized data model. It provides multi-user access to relational databases, and requires no user knowledge of SQL. DataEdit allows users to update and query relational databases quickly and easily from within a forms environment. DataEdit provides built-in, automatic version control and a centralized data dictionary. DataEdit supports a variety of database connection software, including Data Access Language (Apple), DataAccess Manager, SQL*Net (Oracle), OpenClient (Sybase), ODBC, and connects to the following relational databases: Butler, Informix, Ingres, NetWareSQL, ORACLE, Sybase, Rdb, Non-stop SQL, and Red Brick Warehouse.

Requirements

Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 4 MB RAM; 1.5 MB hard disk space; System 7 or later.

T1770Z/A **$499.00**

Brio Technology, Inc.

BrioQuery Enterprise 4.0

NEW VERSION

The BrioQuery Enterprise Series from Brio Technology is the best all-in-one Decision Support Solution for use with the data warehouse. It is a complete solution, and includes the ability to produce impressive reports that combine analytical tables and three dimensional charts, multi-dimensional analysis based on patented desktop OLAP technology coming and the clearest query interface available. The ability for users to do ad hoc queries to over 20 different databases via 8 different types of middleware, full multi-dimensional analysis, and drag-and-drop reporting with live data is built in, with all components working seamlessly together. A familiar binder tab metaphor allows for easy and intuitive movement throughout the tool. There are no additional modules to purchase and total flexibility to access any database.

BrioQuery Enterprise is completely cross-platform supporting Windows 95, Windows NT, Windows 3.1, Mac OS, Power Mac, and UNIX.

Requirements

Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 4 MB RAM; 2.5 MB hard disk space; System 7 or later.

T1771Z/B **$795.00**

POET Software Corp.

POET 3.0

POET is an object-oriented database that understands your C++ declarations so you never have to translate your classes into tables. In addition to traditional database features like queries, device-independent storage formats, nested transactions, and locking, POET offers innovative features that let you:

- Install functions to monitor the progress of long queries
- Install callback functions that are invoked when someone else stores, deletes, locks or unlocks an object
- Ask POET to update objects in memory whenever the objects are changed in the database

POET operates on Macintosh, Power Macintosh, Windows 3.1, Windows NT. Windows 95, Novell (NLM), OS/2, Sun OS, Solaris AIX, HP-UX, SGI Irix, Linux, SCO UNIX, and NeXTStep 486 as a single-user or client/server system. Heterogeneous networks are supported, and any computer can use any object.

Requirements

Macintosh or Mac OS-compatible computer with a 68030 or greater processor; 4 MB RAM to run database; 8 MB RAM for development; 7 MB hard disk space; System 7.5 or later.

POET Personal Edition for Macintosh

T1539LL/B **$249.00**

POET Personal Edition for Power Macintosh

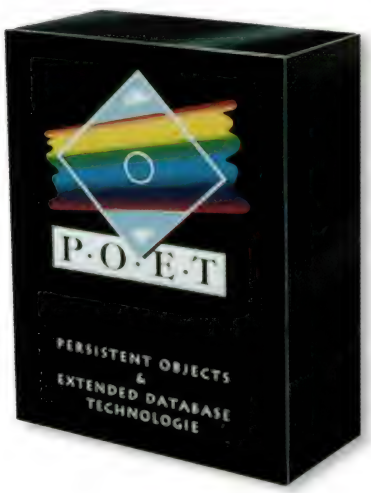
T1540LL/A **$249.00**

POET Professional Edition for Novell & Macintosh

T1542LL/A **$3,999.00**

POET Professional Edition for Novell & Power Macintosh

T1541LL/A **$3,999.00**



ACI US, Inc.

4D Server 1.5

4D Server is an integrated client/server relational database for multi-user systems. Used by thousands of corporations, 4D Server is the proven affordable choice for powerful, enterprise-wide, database applications. 4D Server databases can run on both Macintosh and Windows platforms without modification.

For rapid application development, 4D Server allows multiple developers to build and modify databases simultaneously. 4D Server automatically handles object locking to ensure that developers and users always access a single, current database. 4D Server also contains 4D Backup, a complete backup and mirroring program for backing up your important data.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 6 MB RAM; 15 MB hard drive space; System 6.0.7 or later.

Note

Product available through catalog to U.S. customers only. Customers located outside the U.S. should contact the manufacturer for resellers in their area.

2 users

T1772LL/A *(U.S. only)* **$995.00**

ACI US, Inc.

4th Dimension 3.5

4th Dimension is a premier, relational database and development tool available for both Macintosh and Windows. With its graphical interface, speedy client/server technology, unique multi-tasking architecture, and native, enterprise-wide SQL connectivity options, 4D provides an unparalleled development environment for both small-scale databases and large, corporate applications. 4th Dimension is also platform independent, which allows users to run databases on both Macintosh and Windows platforms without modification.

4th Dimension is the most widely used database on the Internet and adds database functionality, dynamic HTML page generation, Web site administration, and more to your Internet and intranet systems.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 6 MB RAM; 15 MB hard drive space; System 6.0.7 or later.

Note

Product available through catalog to U.S. customers only. Customers located outside the U.S. should contact the manufacturer for resellers in their area.

T1774LL/A *(U.S. only)* **$599.00**

ACI US, Inc.

4D SDK 3.5

4th Dimension Software Development Kit (4D SDK) is a comprehensive development environment for building, compiling, and distributing 4th Dimension applications. 4D SDK combines the leading ACI application development and deployment products, 4th Dimension, 4D Compiler Pro, and 4D Insider, along with free, unlimited runtime distribution.

4D SDK provides a fast, quality development package for developers who create off-the-shelf 4th Dimension applications or for large corporate customers who deploy 4D databases among many users in their organizations.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 6 MB RAM; 18 MB hard drive space; System 6.0.7 or later.

Note

Product available through catalog to U.S. customers only. Customers located outside the U.S. should contact the manufacturer for resellers in their area.

T1773LL/B *(U.S. only)* **$2,295.00**

EveryWare Development Corp.

Butler SQL/Tango Bundle

Butler SQL is the most accessible database server for the Macintosh and Power Macintosh. More than 50 industry-standard applications can make use of Butler SQL's superior client/server database features and performance.

Tango is today's most powerful World Wide Web/database integration tool. With its easy-to-use graphical user interface, you can create complex Web solutions without having to write custom CGIs.

Features

- Client/server SQL RDBMS back-end
- Industry standard API (DAM & ODBC)
- Unlimited users per server
- Supports BLOBS

Requirements

Power Macintosh, Macintosh, or Mac OS-compatible computer with a 68020 or greater processor; 4 MB RAM; 4 MB hard disk space; System 7.1 or later.

2 user Bundle
T1830Z/A **$495.00**

5 user Bundle
T1896Z/A **$995.00**

10 user Bundle
T1897Z/A **$1,495.00**

Unlimited users
T1898Z/A **$2,295.00**

INTERSOLV

INTERSOLV DataDirect ODBC Pack

INTERSOLV DataDirect ODBC Pack, an integral part of INTERSOLV's Virtual Data Warehousing solution, is a comprehensive suite of ODBC drivers that connect ODBC-compliant applications across multiple platforms to all major databases and gateways. These drivers allow you to seamlessly access important corporate data from the familiar desktop applications you use everyday.

INTERSOLV DataDirect ODBC Drivers are now available across eight operating systems including Macintosh, Windows 3.1, Windows NT, OS/2, Sun Solaris, HP-UX, AIX, and Windows 95. ODBC drivers are the critical link between an ODBC-enabled application and an individual database.

INTERSOLV DataDirect ODBC Drivers are the industry standard and are embedded in more than 60 independent software vendor products.

A key component of the INTERSOLV Development Suite, the award-winning DataDirect ODBC Drivers offer robust support for the widest base of operating systems and databases available in the industry.

Requirements

Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 4 MB RAM; 6 MB hard disk space; System 7 or later.

T1761Z/A **$499.00**

INTERSOLV

INTERSOLV DataDirect Developer's Toolkit

INTERSOLV DataDirect Developer's Toolkit is a complete high-level API that provides DBMS-independent access, query, and data handling functions to rapidly build ODBC-compliant SQL applications. It includes ODBC-compliant drivers, is compatible with all development environments, and is available for Macintosh, Windows, OS/2, Windows NT, and Solaris.

Features

- Supports multiple platforms
- Available for Macintosh, Windows 3.1+, OS/2, Windows NT, and UNIX
- Code written for DBMS access portable to other platforms without alterations
- Works with all major development environments
- Callable from any source that can call a DLL or shared library: any development tool and any macro, programming or scripting language
- Creates a powerful and complete DBMS-independent client/server development environment by integrating with a preferred development tool

Requirements

Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 4 MB RAM; 6 MB hard disk space; System 7 or later.

T1762Z/A **$699.00**

General Knowledge

DataScript 3.0

DataScript is probably the quickest, easiest, and most cost-effective way to make your integrated AppleScript solutions database aware. You can make new or existing scripted solutions database aware in a flash. It takes just six lines of AppleScript to fetch data from an industry-standard database management system.

DataScript's scripting vocabulary or terminology is easy to learn, easy to use, and easy to remember. If you've done any scripting before, you'll be up and running with DataScript in no time and be productive very, very quickly. Once you're ready to ship your finished database-aware solution, you'll find our licensing schemes very attractive.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 1 MB RAM; 750 KB hard disk space; System 7 or later; AppleScript 1.1.

DataScript for the Data Access Manager
T1085LL/A **$249.00**

DataScript for Oracle
T1086LL/A **$249.00**

DataScript for SequeLink
T1088LL/A **$249.00**

DataScript for Sybase
T1087LL/B **$249.00**

Sybase

Deft Designer

Deft, the award-winning CASE solution for RDBMS environments, is easy to learn and easy to use. But best of all, it offers developers rapid prototyping, reduced development and maintenance costs, and increased quality through error reduction.

Features

- Macintosh-based Deft Editor Set, including Data Flow Diagram Editor, Entity Relationship Diagram Editor, Program Structure Diagram Editor and a Forms Editor
- Design Compiler that insures design integrity
- Dictionary Utility tools for working directly with dictionaries

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; System 6 or later.

T1576LL/A **$795.00**

Pictorius, Inc.

Peregrine

Peregrine is a powerful rapid application development client/server environment for creating databases and complex compiled applications for royalty-free distribution. A year of free support and updates are included for 68K and Power Macintosh computers.

Features

- Visual and object-oriented down to the Mac Toolbox
- Framework of dialogs, menus, and editors to streamline development
- Automatic input and output window generation and SQL code generation
- True client/server architecture
- Full source code included
- Butler and dtF database connectivity with Developer version—ODBC compatible
- Additional Oracle and Sybase connectivity in Corporate version

Requirements

Macintosh or Mac OS-compatible computer with a 68040 or greater processor; 20 MB RAM; 50 MB hard disk space for Peregrine Developer; 60 MB hard disk space for Peregrine Corporate; System 7.0 or later.

Peregrine Developer
T1900Z/A **$1,495.00**

Peregrine Corporate
T1901Z/A **$2,495.00**

Brossco Systems, Inc.

Voyant 2.0

Voyant is a powerful client data access tool that provides easy access to information in an SQL database, without SQL programming.

Voyant's advantages over other data access tools is the presentation of data in the form of powerful graphics, providing a comprehensive data overview. With Voyant, complex data is grouped into dimensions and presented as easy-to-use pop-up menus. By presenting large amounts of data via menus and by swapping dimensions, hundreds to thousands of dynamic views of your information are possible within a single graphic. Voyant is easy to implement and administer; a productive data access system can be created in a few hours.

Voyant has database administration tools for creating tables, views, and viewing data in the database. Voyant can also input and output data between text files and a database.

Requirements

Power Macintosh, Macintosh, or Mac OS-compatible computer with a 68020 or greater processor; 5 MB RAM; 3 MB hard disk space; System 7.0.1 or later; Oracle v. 5, 6, 7, or any DAL DBMS.

Note

Product available through catalog to U.S. customers only. Customers located outside the U.S. should contact the manufacturer for resellers in their area.

T1769LL/A *(U.S. only)* **$595.00**

Claris Corporation

FileMaker Pro 3.0

Accelerated for Power Macintosh

NEW VERSION

FileMaker Pro software is the only relational database application designed to help you easily manage and share information in the real world. Starting with raw data, it's fast and easy to create working databases—or use one of the more than 40 fully designed templates for instant business, education, and home solutions.

When you're ready to customize your database, FileMaker Pro has a set of powerful yet extraordinarily easy-to-use tools that will take you well beyond where standardized wizards and other assistance technologies leave you. Create stunning input screens, reports, labels, and mail merge letters in a flash. Automate frequently used procedures and sequences, and much more.

FileMaker Pro fits easily with your level of database expertise. Instead of separating your database into different parts such as data, forms, queries, reports, scripts, etc., FileMaker Pro integrates everything for you. Even relational capability is built into this intuitive, integrated design making it easier to "design as you go" than with other database products.

With all these advantages, it's no wonder that people everywhere have come to depend on FileMaker Pro 3.0. Nothing makes it easier to organize all your vital information and put it at your fingertips.

Features

- FileMaker Pro 3.0 for Macintosh is completely updated to run native on all Power Macintosh and compatible computers.
- AppleScript support includes Apple events in ScriptMaker scripts—even using FileMaker Pro field values. Create even more powerful, portable solutions by attaching complete AppleScript applets.
- PlainTalk support allows contents of files to be spoken.
- AppleTalk, MacIPX, and TCP/IP support uses built-in networking for peer-to-peer file sharing over a network.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 4 MB RAM (8 MB recommended for 680x0 computers and required for Power Macintosh computers); System 7.0 or later (System 7.1 recommended); CD-ROM drive (software, help, and tutorial included on 1.4 MB disks).

Note

Product available through catalog to U.S. customers only. Customers located outside the U.S. should contact the manufacturer for resellers in their area.

T1717LL/B *(U.S. only)* **$199.00**

Claris Corporation

FileMaker Pro Server 3.0

Accelerated for Power Macintosh

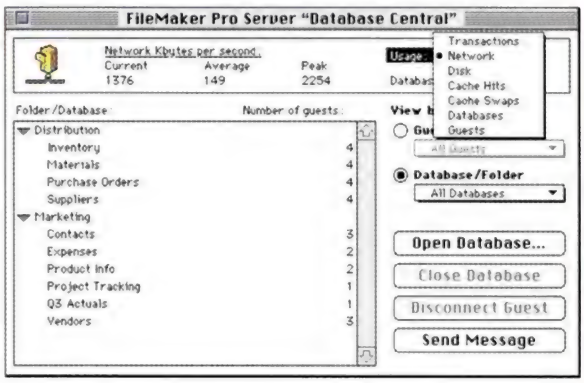
NEW VERSION

FileMaker Pro Server is a powerful relational network server which delivers dramatically faster multiuser performance and new centralized network management tools across AppleTalk, IPX/SPX, and TCP/IP networks.

Designed for demanding cross-platform businesses, FileMaker Pro Server is a high performance relational database engine that accelerates FileMaker Pro operations over a network. With optimized indexing and record locking, workgroup users can realize significant performance gains. The unique "multi-protocol" feature allows AppleTalk, IPX/SPX, and TCP/IP network users to access hosted databases simultaneously. FileMaker Pro Server offers increased scalability, supporting up to 100 users at a time per server, as well as hosting up to 100 database files at once!

Performance improvements fully leverage the Power Macintosh RISC technology, as well as asynchronous I/O and multiple processing threads.

FileMaker Pro Server also offers network administrators powerful, new visual file and network tools to centralize file access, monitor server and network activity, send messages to connected guests, and even open and close groups of files automatically.



Features

- Multi-protocol support hosts databases for Macintosh and Windows users running AppleTalk, IPX/SPX, and TCP/IP.
- Optimized record and index locking reduces network traffic and improves guest performance.
- Multi-threading processes multiple tasks simultaneously.
- Asynchronous file I/O accelerates disk access with compatible hardware.
- Anticipatory caching ensures required data is in memory for faster access.
- Easy administration is provided by usage displays, remote administration, and automatic log files.

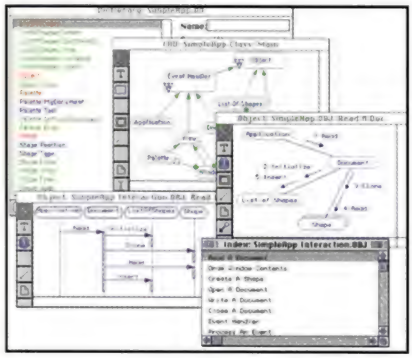
Requirements

Macintosh or Mac OS-compatible computer with a 68030 or greater processor; 8 MB RAM, System 7.1 or later; Thread Manager (included with application); multiuser file sharing support (AppleTalk, IPX/SPX, or TCP/IP); TCP/IP networking requires Open Transport 1.0.8 or later.

Note

Product available through catalog to U.S. customers only. Customers located outside the U.S. should contact the manufacturer for resellers in their area.

T1780LL/B *(U.S. only)* **$999.00**



Excel Software

MacA&D 5.0

MacA&D, winner of the CIO Magazine Readers' Choice Award in the category of Macintosh CASE tools, provides an integrated solution for object-oriented analysis and design. Methods include Booch 94, OMT, Shlaer/Mellor, Jacobson, Fusion, and Coad/Yourdon. Structured analysis and design methods include Yourdon/DeMarco, Gane and Sarson, and Hatley/Pirbhai.

Create data models using Information Engineering, Chen, or Shlaer/Mellor notations; then generate foreign keys and SQL code automatically. Track requirement statements to diagrams, or test procedures by double-clicking. Share information across a network using the multi-user, team dictionary and requirement documents.

Generate structure charts from existing C, Pascal, Basic, or Fortran code, or class diagrams from C++ or Object Pascal using the companion Translator utility.

Features include cut, copy, paste, publish, subscribe, text import/export of diagrams, dictionary, Balloon Help, and scalable, multi-page, multi-level diagrams with index window for easy navigation.

Features

- Structured analysis and design
- Object-oriented analysis and design
- Real-time and multi-task design
- Data and screen modeling
- Integrated code editing and browsing
- Multi-user dictionary and requirements
- Code to design diagrams for C, C++, etc.
- Design diagrams to code for C, C++, etc.
- State modeling diagrams and tables
- Use cases with traceability

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 8 MB RAM; 15 MB hard disk space; System 7 or later.

Special User Notes

Call 1-515-752-5359 for educational, site licensing, update service and on-site training prices. Ask for your free technical brochure.

MacA&D 5.0

T1766Z/A **$2,995.00**

MacA&D 5.0 Demo & Manuals

T1833Z/A **$149.00**

Excel Software

MacDesigner 5.0

MacDesigner supports software engineering methods including structured, object-oriented, and multi-task design. Structure charts show module organization in procedural programs, while object diagrams show the design mechanism in an object-oriented design. It includes code editing and browsing using the built-in Browse window and a data dictionary for defining design details.

The integrated requirements window provides traceability from requirement statements to design diagrams, code, or test procedures. Real-time, multi-tasking systems can be designed showing threads of execution, interrupt service routines, and operating system services like queues, mailboxes, and semaphores. This tool is used for detailed design and maintenance of software development projects.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 8 MB RAM; 15 MB hard disk space; System 7 or later.

MacDesigner 5.0

T1764Z/A **$995.00**

MacDesigner 5.0/Expert

T1763Z/A **$1,595.00**

MacDesigner 5.0 Demo & Manuals

T1832Z/A **$79.00**

Excel Software

Translator 1.0

Generate multi-level structure charts automatically from existing C, Pascal, BASIC, or FORTRAN code using the Translator with MacDesigner. Use Translator and MacAnalyst to generate class diagrams from C++ or MPW Object Pascal showing inheritance structure with Booch, OMT, Shlaer/Mellor, and Coad/Yourdon notations. Double-clicking diagram objects reveals source code using the integrated code browser.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 6 MB RAM; 10 MB hard disk space; System 7.0 or later.

T1834Z/A **$495.00**

Excel Software

MacAnalyst 5.0

MacAnalyst supports software engineering methods including structured analysis, data and screen modeling, object-oriented analysis, and data dictionary. Object-oriented class diagrams and state modeling methods include Booch, OMT, Shlaer/Mellor, Jacobson, Fusion, and Coad/Yourdon.

The integrated requirements window provides traceability from requirement statements to analysis or design diagrams. This tool is used by system analysts, database designers, and software developers to reduce development cost and improve quality by automating the analysis and top level design process.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 8 MB RAM; 15 MB hard disk space; System 7 or later.

MacAnalyst 5.0

T1666LL/B **$995.00**

MacAnalyst 5.0/Expert

T1765Z/A **$1,595.00**

MacAnalyst 5.0 Demo & Manuals

T1706LL/B **$79.00**

StructSoft, Inc.

TurboCASE 4.25

TurboCASE is an award-winning CASE tool that supports multiple methodologies for both analysis and design. It supports the structured methodologies with three Real-Time extensions. It also supports the data modeling for database design and newer object-oriented analysis and design.

In the OO supports, it provides editors for class hierarchy, class definition, class collaboration, and class design.

TurboCASE/Sys 2.0

TurboCASE/Sys is the only comprehensive system engineering CASE tool that supports the complete Hatley/Pirbhai methodology. It not only supports the Real-Time requirements analysis, but also goes all the way to support the architecture modeling which is so essential for large system development involving many layers of hardware and software components.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 4 MB RAM; 2 MB hard disk space; System 6.5 or later.

TurboCASE 4.25

T1756Z/A **$995.00**

TurboCASE/Sys 2.0

T1757Z/A **$3,495.00**

ICONIX Software Engineering, Inc.

A Unified Object Modeling Approach

This is the first interactive multimedia product that provides detailed Object-Oriented methodology training on CD-ROM.

Anticipating the trend that has brought Booch, Rumbaugh, and Jacobson together in an effort to unify their methods, "A Unified Object Modeling Approach" offers extensive tutorials on the strengths of each method: Jacobson for user-driven requirements and traceability across the lifecycle, Rumbaugh for domain analysis and reuse across multiple projects, and Booch for detailed C++ design. In addition, Prototyping is stressed as a requirements definition technique, with extensive explanations on how to derive Use Case and Domain Object Models from prototypes.

Focal points include tutorial examples relevant to state-of-the-art systems being implemented today, such as: a Video on Demand System, a Hospital Information System, a Financial Portfolio Management System, and an Automobile Navigation System.

Requirements

Macintosh or Mac OS-compatible computer with a 68030 or greater processor; 5 MB RAM; 4 MB hard disk space; System 6.0.7 or later; 13" color monitor; CD-ROM drive.

T1905Z/A **$995.00**

ICONIX Software Engineering, Inc.

O-O Starter Kit

The ICONIX O-O Starter Kit provides developers with a low-cost, low risk way of getting their "feet wet" in the world of Objects. The kit provides everything developers need to get started in Object-Oriented software engineering, providing exposure to multiple methodologies so developers can pick the ones that are right for them.

It includes: ICONIX's state-of-the-art training tool, a CD-ROM entitled "An Object Methodology Overview," the industrial-strength Object-Oriented Analysis and Design capabilities of ObjectModeler and FastTask, and one year maintenance from the manufacturer.

Requirements

Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 5 MB RAM; 4 MB hard disk space; System 6.0.7 or later; CD-ROM drive.

T1904Z/A **$3,495.00**

Additional Products

For additional Iconix CASE Tools, see page 57.

MultiQuest Corporation

S-CASE 2.0

S-CASE is an object-oriented analysis and design tool that uses the Booch notation to graphically illustrate and model software systems.

High quality C++ code can be generated directly from the models. S-CASE allows iteration through the design, code, and test cycle while keeping the models and code in sync. This iterative approach allows developers to enhance their design through successive refinement without worrying about outdating their models.

Requirements

Macintosh or Mac OS-compatible computer with a 68040 or greater processor; 4 MB RAM; 3 MB hard disk space; System 7 or later.

T1871Z/A **$495.00**

Apple Computer, Inc.

Apple Remote Access Modem Toolkit 2.0

Included in DEVELOPER MAILING

This product provides the tools and documentation you need to create modem connection scripts for the Apple Remote Access Client for Macintosh, Apple Remote Access Personal Server, or Apple Remote Access MultiPort Server. These scripts are necessary for establishing and terminating connections.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 4MB RAM; 200 KB hard disk space; System 7 or later; an Apple modem or Hayes-compatible modem (2400 baud minimum) and appropriate cable; HyperCard 2.0 or later; Apple Remote Access Client for Macintosh or Apple Remote Access Personal Server for Macintosh.

R0129LL/C **$50.00**

Apple Computer, Inc.

MacX 1.5

Accelerated for Power Macintosh

MacX 1.5, Apple's high-performance X Window System solution for the Mac OS, now delivers PowerPC-native performance and X11R5 standards compliance to users. MacX combines complete X Window System functionality with Macintosh ease of use for both new and experienced X Window System users. Not only can you display network-based X client applications on your Macintosh desktop—you can cut and paste text and color graphics between Macintosh applications and X clients.

With MacX, you can access X clients from a pull-down menu, and display X clients in familiar Macintosh windows for easy moving and resizing.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 5 MB RAM (8 MB recommended) for 68K-based computers; 8 MB (16 MB recommended) for PowerPC processor-based computers; 8 MB hard disk space; System 7.1 or later; access to a UNIX or VMS host via an Ethernet or Token Ring connection, or via LocalTalk with a DDP/IP gateway; access to a CD-ROM drive.

M0108Z/E **$149.00**

Special Offers

Save $70 if you already own a previous version of MacX.

R0688Z/A **$79.00**

Owners of an eligible competitor's product can save $50.

R0687Z/A **$99.00**

Apple Computer, Inc.

Apple Internet Router Administrator's Toolkit 3.0

Designed to give network administrators greater flexibility in configuring the Apple Internet Router, this kit allows for easy sharing of host lists for users of the AppleTalk/IP Wide Area Extension.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 4 MB RAM; 300 KB hard disk space; System 7 or later.

R0490LL/A **$199.00**

Apple Computer, Inc.

Macintosh Application Environment (MAE) 2.0

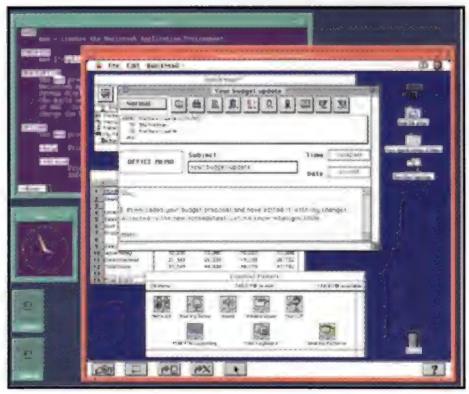
Macintosh Application Environment (MAE)—the virtual Macintosh for open systems—is an innovative software product that provides a complete Macintosh environment in an X Window, allowing you to run applications for Mac OS right on your workstation.

MAE brings the functionality and ease-of-use of the Macintosh computer to Sun Microsystems SPARCstations running the SunSoft Solaris operating system, as well as to Hewlett-Packard Series 700 workstations running HP-UX.

Version 2.0 extends the power of MAE with the inclusion of AppleTalk networking, making it easy to share printers, files, and e-mail with other Macintosh and MAE users on a network. Other new features include MacTCP, dramatic performance gains, support for Macintosh and sound-based applications.

Features

- **It's a virtual Macintosh** MAE provides the familiar Macintosh graphical user interface and desktop in an X Window. Based on Macintosh System 7.1 (and incorporating several handy features of System 7.5), MAE lets you open UNIX files (including NFS-mounted volumes), access UNIX applications through the Macintosh interface, and use systems services (such as PostScript printers on the UNIX network).
- **It runs Macintosh applications** MAE lets you use the most popular off-the-shelf Macintosh software on your UNIX workstation. It provides one consistent interface for all Macintosh applications, complete with icons, menus, windows, and outline fonts.
- **It integrates smoothly with UNIX** MAE is fully integrated with the standard UNIX file system and allows you to copy and paste text and graphics between the UNIX and Macintosh environments. MAE organizes UNIX files and applications, and allows use of the control panels from the Macintosh desktop to configure your keyboard, mouse, and monitor settings.
- **It makes networking easy** Through built-in support for AppleTalk, you can easily share documents, electronic mail, and printers with other MAE and Macintosh users, allowing for tighter integration between UNIX workstations and Macintosh-based administrative systems. And, support for MacTCP enables you to access the Internet and TCP/IP-based applications.



Requirements

HP Series 700 workstation running HP-UX 9.0x; or Sun SPARCstation running Solaris 2.3 or later; X Window System version 11, release 4 or 5; 16 MB RAM (32 MB recommended); 16 MB hard disk space (22 MB recommended); Window manager such as Motif, HP VUE, or OPEN LOOK (Includes STREAMS/UX to enable AppleTalk connectivity on HP Series 700 workstations running HP-UX).

MAE 2.0 for Solaris (1 user)

M2191Z/B **$459.00**

MAE 2.0 for Solaris (20 user)

M3162LL/B **$7,499.00**

MAE 2.0 for HP-UX (1 user)

M3128Z/B **$459.00**

MAE 2.0 for HP-UX (20 user)

M3352LL/B **$7,499.00**

Apple Computer, Inc.

PowerShare Collaboration Servers 1.1

If you're using System 7.5 and PowerTalk, you shouldn't be without PowerShare collaboration software. Now you can have server-based messaging, shared catalogs, and network security services on AppleTalk networks. And, PowerShare provides the foundation for team productivity and work flow solutions.

The Mail Server acts as a store-and-forward system for PowerTalk users, while the Catalog Server is a shared repository for collaborative information.

Easy Administration

- Provides consistency and ease of administration for large teams of PowerTalk users
- Includes easy-to-use administrative utilities to streamline installation and management
- Allows server management from any Macintosh on the network
- Enables the network administrator to control access to shared catalogs

Automatic Network Security

- Authenticates PowerTalk users and applications
- Encrypts network traffic between PowerTalk users and applications

Scalability

- Allows a network administrator to set up a single server in minutes
- Provides the infrastructure to support large multiserver distributed systems

Collaboration On Demand

- Allows multiple users and applications to share catalogs and server gateways
- With Apple Remote Access, lets mobile PowerTalk users keep in touch with colleagues easily anytime, anywhere

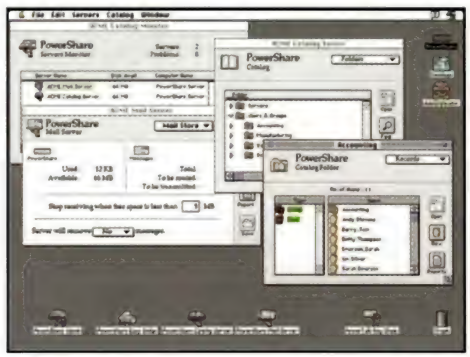
Optional gateway software is available from independent software vendors. Internet mail connectivity is available through Mail*Link SMTP for PowerShare from StarNine.

Requirements

Server: Macintosh or Mac OS-compatible computer with a 68020 or greater processor; 8 MB RAM; 10 MB hard disk space (plus additional space per user for storage); System 7.1.1 or later with PowerTalk; an AppleTalk network.

Client: Macintosh or Mac OS-compatible computer running System 7.5 or later with PowerTalk.

M1907LL/A **$769.00**



Orders are shipped within 24 hours. **Order Toll-free Monday through Friday, 7am-5pm, PST.** U.S.: **1-800-282-2732**

Apple Computer, Inc.

Newton Toolkit 1.6

With Newton Toolkit, you can easily create software that runs on any Newton PDA, including Apple's MessagePad and Motorola's Marco. The Newton Toolkit is a development environment that reduces the complexity and time involved in creating great software products.

See Results in Seconds The Newton Toolkit provides all the tools you need to create applications and content for Newton PDAs. Its rapid prototyping features, library of extensible components, and interactive development cycle let you see results in seconds. This capability helps you bring products to market faster.

Now Supports Newton 2.0 The latest version of Newton Toolkit now includes support for Newton 2.0, the latest version of the Newton operating system. Newton Toolkit 1.6 also has been accelerated for Power Macintosh and includes some new debugging and diagnostic tools that run on your Newton PDA.

Dynamic Language Eases Development The language at the core of the Newton Toolkit is called NewtonScript. This object-oriented, dynamic language provides everything from automatic memory management and event handling to built-in user interface, data storage, and communications objects.

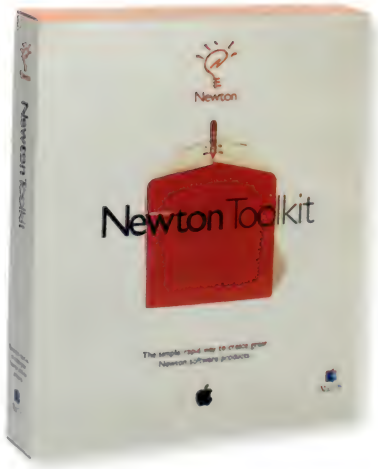
NewtonScript is tightly integrated with the Newton architecture and includes features that let you develop applications interactively, without going through the traditional edit, compile, and link cycles. You can make changes to your code and see the results right away.

New Compiler Enables Faster Applications Newton Toolkit features a NewtonScript compiler and profiler that enable you to create much faster Newton applications. Using these tools, you can choose particular routines in your application to compile down to native ARM machine language. This gives you the control you need to achieve the highest possible performance for your application.

Publish Electronic Books with Book Maker Newton Book Maker, included with Newton Toolkit, is a tool for publishers that facilitates the creation of electronic books, travel guides, reference materials, and corporate documentation for Newton PDAs. It automatically creates sophisticated, customizable, and easy-to-navigate applications from electronic documents (such as word processing documents) containing both graphics and text. Newton programmers can use Newton Toolkit objects and the NewtonScript language to fully extend and customize Book Maker applications.

New in Newton Toolkit 1.6

- Accelerated for Power Macintosh
- Support for Newton 2.0
- Improved Debugging Tools



Licensing Note

Call Apple Software Licensing at 1-512-919-2645 for licensing details.

Requirements

Macintosh or Mac OS-compatible computer with a 68030 or greater processor (a Power Macintosh is highly recommended); 8 MB RAM (16 MB recommended for Power Macintosh); 10 MB hard disk space; System 7.0 or later; CD-ROM drive.

Newton Toolkit 1.6

H0107Z/D **$299.00**

Newton Toolkit Update 1.6

H0167Z/C **$49.00**

(Includes updates to both Newton Toolkit 1.6 and Newton Book Maker 1.1; only available to owners of earlier versions of Newton Toolkit)

Newton Programmer's Guide for Newton 2.0

The Newton Programmer's Guide consists of three volumes. Two volumes covering the Newton System Software, and one volume covering Newton Communications.

The two-volume set, Newton Programmer's Guide: System Software, is the definitive guide and reference for Newton programming. This set of volumes explains how to write Newton programs and describes the system software routines that you can use to do so. This guide is for anyone who wants to write NewtonScript programs for the Newton family of products.

The Newton Programmer's Guide: Communications, describes the Newton communications system software for version 2.0. This guide is for anyone who wants to write NewtonScript programs for the Newton family of products, and specifically covers the communication interfaces in Newton system software.

An electronic version of this guide is included in Newton Toolkit.

H0194Z/A **$149.00**

Newton 2.0 User Interface Guidelines

Newton 2.0 User Interface Guidelines describes how to create software products that optimize the interaction between people and devices that use Newton 2.0 software. The book explains the whys and hows of the Newton 2.0 interface in general terms and in specific detail. It also helps you link the philosophy behind the Newton 2.0 interface to the actual implementation of the interface elements. Examples from a range of Newton software show good human interface design. These examples are augmented by descriptions and discussions of the reasoning behind the guidelines.

An electronic version of these guidelines are included in Newton Toolkit.

H0193Z/A **$35.00**

SAVE

COMPLETE NEWTON PROGRAMMING BUNDLE

Now, get the tools AND the printed documentation!

- Newton Toolkit 1.6
- Newton Programmer's Guide for Newton 2.0
- Newton 2.0 User Interface Guidelines

B2746Z/A

only **$349.00**

Apple Computer, Inc.

Newton Developer Mailing

The Newton Developer Mailing is a monthly mailing delivering the latest essential technical and marketing information on the Newton platform to Newton developers from Apple Computer. It consists of a monthly copy of Apple Directions, a bi-monthly copy of the Newton Technology Journal, and the Newton Developer CD, which is released quarterly. Additional marketing and technical information, including the latest market research or platform reports from the Newton Systems Group, will be added each month to supplement the regularly scheduled pieces.

Newton Technology Journal
This bi-monthly publication provides latest technical and business news from the Newton Group, with comprehensive programming articles from Apple engineers and platform experts.

Newton Developer CD
The quarterly CD contains the latest sample code, Q&As, documentation, development tool updates, and platform information.

Apple Directions
This monthly newsletter has insights into Apple technologies, strategies, and priorities, as well as useful business information.

Newton platform news and data
You also get additional materials including white papers, platform guidelines, licensee news, market research, etc., which provide insights into the emerging Newton market.

Requirements
A Macintosh computer with a CD-ROM drive is required for the Developer CD.

Special User Notes
The mailing is monthly, but some of the contents are not. You will receive a packet each month full of the latest information. The contents of the mailing will change from month to month. The Newton Technology Journal is included every other month. The Newton Developer CD is included once per quarter. Other materials added to the mailing are as recent as possible.

Newton Developer Mailing (12 mailings)
R0633LL/A **$149.00**

Renewal Subscription
R0634LL/A **$149.00**

NS BASIC Corporation

NS BASIC 3.0

NS BASIC is a full implementation of the BASIC programming language with extensions to take advantage of the rich Newton 2.0 environment. It allows rapid development of a wide variety of applications, including forms.

Program NS BASIC directly on the Newton, or use the keyboard and screen of your Mac or PC.

NS BASIC is a completely interactive environment. You can enter and run programs immediately.

Features
- Create your own Newton packages
- Set up Newton style interfaces using NS BASIC's toolbox of window objects
- Capture user input using pick lists, checkboxes and handwriting
- Communicate using the serial and IR ports
- Create fully indexed files or access the built-in data
- Do graphing and scientific calculations
- Hook NS BASIC programs into other applications
- A 240-page handbook,with lots of code samples and technical notes, is included.

Note
NS BASIC 3.0 is supplied on Macintosh and DOS format diskettes. It runs on all Newton 2.0 devices. Version 2.5 included for Newton 1.x devices.

T1667LL/B **$99.00**

FOR INFORMATION ON
NEWTON DEVELOPER PROGRAMS
which include the Newton Developer Mailing
SEE PAGE 46

Books and References

For books and references in the Newton category, see page 55.

Wright Strategies

FormLogic 1.5

FormLogic is a Mac/PC development environment for the Newton, enabling users to create and deploy turnkey data collection solutions. It includes a library of data collection "agents," a comprehensive scripting language, and a full communications subsystem. It's an ideal tool for developers, VARs, and system integrators!

Features
- Powerful scripting language
- Form record dispatching
- Robust Server/Form Administrator
- Support of wireless LAN devices
- Report Generation/Printing

Requirements
Macintosh: Macintosh or Mac OS-compatible computer with a 68030 or greater processor; 8 MB RAM; 3 MB hard disk space; System 7.0 or later.
PC: IBM or IBM-compatible computer with a 80486 or greater processor; 8 MB RAM; 3 MB hard disk space; Windows 3.0 or later.
Newton: OS 1.3 or later (works with 2.0), 300 KB RAM.

Notes
Additional Newton Runtime: $195.

FormLogic Builder 1.5 *(Includes 1 Runtime)*
T1749Z/B **$895.00**

FormLogic Server 1.5
T1748Z/B **$1,095.00**

Just starting your great adventure as a Macintosh applications developer?

Let us guide you.

1. Learn a programming language

- Take a programming class at your local college
- Buy a book

Learn C on the Macintosh ($34.95, see ad on page 52)
C is the starting point for most Macintosh programmers. This book and disk package offers a comprehensive tutorial for people who want to learn programming.

Learn C++ on the Macintosh ($36.95, see page 54)
C++ is the language of the nineties.

"The World Wide Web and the Internet are great resources for the novice Macintosh programmer. Apple's developer pages at **http://dev.info.apple.com** have tons of technical information. And newsgroups like **comp.sys.mac.programmer** are a great place to exchange information and ask questions."

—Brian T., Apple Engineer

2. Learn the Macintosh toolbox

- Take the Developer University class *QuickStart Mac OS Programming*
  This is a great class for programmers from other platforms to quickly come up to speed on the Macintosh platform. See page 45 for dates.
- Buy *Programming Starter Kit for Macintosh* ($45.00, see page 45)
  This all-in-one kit contains everything you need to get started, including an introductory version of Metrowerks development environment.
- *Foundations of Mac Programming* ($39.95, see page 54)
  This inclusive reference and tutorial is packed with the fundamentals of Mac programming.
- *Symantec C++ Programming for the Macintosh* ($39.95, page 54)
  A practical hands-on guide to programming for the Macintosh.

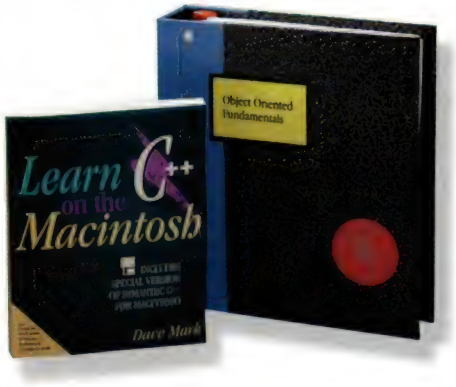
3. More Resources

- *Apple Developer Mailing* ($149.00, see page 48)
  This one-year subscription is one of the best deals around. It is chock full of valuable tools—all of the Mac OS SDKs, a complete set of technical documentation including the *Inside Macintosh* series and *Macintosh Human Interface Guidelines* all in electronic format.
- *Programming the Power PC* ($39.95, see page 54)
  An introduction to PowerMac programming.
- Apple developer web site: http://dev.info.apple.com
- *Inside Macintosh* books—the key technical documentation for all Macintosh programmers.

Developer University

Developer University is your source for development-level training on key Apple technologies. DU offers a variety of self-paced, classroom and Internet training options to meet your learning objectives.

Self-Paced Training



Developer University's self-paced courses put affordable training on your desktop, making it available when and where you need it.

Apple Computer, Inc.

Object-Oriented Fundamentals 1.1 (40 hours)

NEW VERSION

Learn what object-oriented programming is all about. If you are a C programmer who wants to move up to C++ this is the self-paced training course for you. DU's multimedia Object-Oriented Fundamentals course enables you to easily make the paradigm shift from procedural to object-oriented design. It will introduce you to the entire object skill set, from general concepts through analysis and design. The course includes QuickApp, a commercially available class library, that will assist you in the completion of the labs. This course assumes that you will be using Metrowerks CodeWarrior integrated development environment in the labs. A "lite" version of CodeWarrior is included with the course. Symantec's C++ integrated development environment will work with the labs as well but is not included. This course also includes a copy of the book *Learn C++ on the Macintosh* by Dave Mark.

Requirements

Macintosh or Mac-OS compatible computer with a 68020 or greater processor, 12 MB RAM, 20 MB disk space, System 7.5; CD-ROM drive.

Prerequisites

You must be able to program a simple application in C on any platform.

R0560LL/B **$245.00**

Apple Computer, Inc.

Intermediate Programming: 7.5 Topics (10 Hours)

This self-paced mini-course is designed to allow software developers to write code that extends the functionality of an application for System 7.5. It contains comprehensive materials for drag and drop, threads, standard mail package, and QuickDraw GX printing. It also has a discussion on scripting the Finder. Students should be familiar with the basics of developing an application on the Macintosh.

Requirements

Macintosh or Mac-OS compatible computer with a 68020 processor or greater; 5 MB RAM; 10 MB hard disk space; System 7.1.2 or later; CD-ROM drive; HyperCard 2.1 or later.

Note

The lab assignments use an old version of Think C. Symantec C++ for Power Macintosh 8.4 contains a newer version of Think C which you can use for most of the lab exercises. It is not required for viewing the lessons or running the demo applications.

R0630LL/A **$49.95**

A survey of developers showed that DU courses reduced their learning cycle, saved time and money, and shortened time to market by as much as seven weeks!

Don't ignore these benefits—register for the course of your choice now!

Apple Computer, Inc.

Apple Events/AppleScript Programming Tutorial (40 Hours)

This self-paced tutorial teaches you the basics of Apple's scripting architecture using core modules from Developer University's classroom course.

You'll learn how to make your applications script-ready and recordable and to take advantage of AppleScript software.

Before taking this class, you should know the C programming language, and have written at least one Macintosh application.

Requirements

Macintosh or Mac-OS compatible computer with a 68020 processor or greater; 4 MB RAM; 10 MB hard disk space; System 7 or later.

R0224LL/B **$95.00**

Apple Computer, Inc.

Programmer's Introduction to RISC and PowerPC (8 Hours)

This CD-based tutorial explains the basics of CISC, RISC and PowerPC system software. It is the perfect "how to" primer for preparing your source code for recompilation on Power Macintosh machines, and for improving its speed and portability. No labs are included.

Requirements

Macintosh or Mac-OS compatible computer with a 68020 processor or greater; 5 MB RAM; 10 MB hard disk space; System 7.1.2 or later; CD-ROM drive; a color monitor is recommended.

R0172LL/A **$49.95**

Online Topics

In our efforts to get you the information you need and want, in as timely and accessible a way as possible, Developer University has put a number of topics on the Internet. These short self-paced overviews are free. Feedback has been extremely positive. We will continue to use the Web when it is appropriate. In the meantime, if you have any ideas or suggestions, we would love to hear from you. Please see the Information and Registration document for all the ways to contact us.

What's on the Web?

Introduction to PowerTalk

This is an introduction to the basket of technologies that make up the Apple Open Collaboration Environment. It covers the architecture of the AOCE system, the services provided by various AOCE Service Managers, and the applications that these services enable. It does not cover AOCE System Management and does not go into the details of AOCE programming interfaces.

Introduction to RISC Technology

This is an introduction to microprocessor technology, specifically the basics of RISC technology. We begin with a brief history of computing and an introduction to microprocessor technologies. Then we discuss Complex Instruction Set Computing (CISC) and Reduced Instruction Set Computing (RISC). And, finally, we include a discussion of Apple's RISC strategy.

Programmer's Introduction to PowerPC

This is a detailed overview of the Power Macintosh technology. It presents the basics of PowerPC development issues and strategies for porting your source code. It will cover calling conventions, shared libraries, global data, compatibility issues, and performance issues.

What is OpenDoc?

This is a complete overview of Apple's OpenDoc architecture, presenting the concepts behind the document-centric development model, the user-interface model, and the programming model. It covers the structure of a simple "part" and reviews code that defines and constructs a basic OpenDoc "part," and discusses the major technologies used by OpenDoc.

How do you find our Web overviews?

http://dev.info.apple.com/du.html

Featured Book

Hayden Books

Programming Starter Kit for Macintosh

This all-in-one kit contains everything you need to get started with the world of Macintosh programming! Featuring valuable tools on CD-ROM, this book teaches the skills and techniques necessary for successful development. It includes a "lite" version of Metrowerks CodeWarrior for doing the lab exercises.

T1742Z/A **$45.00**

Classroom Training

DU classroom courses bring you training in the latest Apple technologies. Classes are offered on-site in Cupertino, CA, and at selected extension sites.

For descriptions and registration, contact the DU Registrar at 1-408-974-4897, or check out our Web pages at: http://dev.info.apple.com/du.html

Course Index and Schedule
April 1996 through July 1996

Advanced C++
5 days — April 27-May 3, Cupertino, CA — **$1,000**

Apple Events/AppleScript Programming
5 days — May 6-10, Cupertino, CA — ~~$1,200~~ REDUCED PRICE! **$1,000**

Creating Apple Guide Help Systems
4 days — May 6-9, Cupertino, CA — ~~$1,200~~ REDUCED PRICE! **$800**

Creating OpenDoc Parts
5 days — April 15-19, Cupertino, CA; May 20-24, Cupertino, CA; June 17-21, Cupertino, CA; July 15-19, Cupertino, CA — **$1,500**

Macintosh Debugging Strategies and Techniques
3 days — April 8-10, Cupertino, CA; July 8-10, Cupertino, CA — **$900**

Multimedia Development with QuickTime VR
3 days — April 16-18, Cupertino, CA; May 7-9, Cupertino, CA; May 21-23, Cupertino, CA; June 18-20, Cupertino, CA; July 16-18, Cupertino, CA — **$900**

Newton Programming: Essentials 2.0
5 days — April 15-19, Cupertino, CA; May 20-24, Cupertino, CA; June 17-21, Cupertino, CA; July 22-26, Cupertino, CA — **$1,500**

Programming with QuickDraw GX
4 days — On demand—call DU Registrar for more information

Programming with QuickDraw 3D
3 days — April 23-25, Cupertino, CA; May 20-22, Cupertino, CA — **$900**

QuickStart Mac OS Programming
5 days — April 15-19, Cupertino, CA; May 6-10, Cupertino, CA; June 3-7, Cupertino, CA; July 8-12, Cupertino, CA — **$1,500**

Scripting with AppleScript
2 days — April 8-9, Cupertino, CA; June 10-11, Cupertino, CA; July 22-23, Cupertino, CA — **$600**

For location, pricing, and enrollment information on courses offered at our East Coast location, contact Simon/Ross and Associates, a DU Extension, at 1-416-960-5647 or, outside of Toronto, at 1-800-714-5714.

Apple Developer Programs

Technical and Marketing Services, Information, and Support for Developers of Apple-Compatible Solutions and Applications

Apple's Developer Programs provide a broad mix of industry-leading technical and marketing information and services, targeted to meet the needs of our growing community of developers. We offer a variety of programs that include the support you need to develop, evangelize, consult, and sell Apple technologies. Programs include:

Macintosh Developer Programs

Newton Developer Programs

Apple Multimedia Program

Education Solution Provider Program

Apple Solution Professionals Network

Value Added Reseller (VAR) Programs

Macintosh Developer Programs

Mac OS

As a member of a Macintosh Developer Program, you will receive:

- Apple Developer Mailing (see ad on page 48)
- Mac OS SDKs
- Macintosh Technology Seeding
- Access to Apple's Technical Support Onsite Lab

Macintosh Associates: $250.00
Self-help program providing information and services.

Macintosh Associates Plus: $500.00
Affordable technical support including ten programming-level questions per year via e-mail.

Macintosh Partners: $1,500.00
Comprehensive technical support including unlimited programming-level questions via e-mail.

For more information, visit http://dev.info.apple.com.

Newton Developer Programs

Newton

As a member of a Newton Development Program, you will receive:

- Newton Developer Mailing (see ad on pg 42)
- Updates to Development Tools
- Newton Developer Class Discounts
- Invitation to the Newton Developers Conference

Newton Associates: $250.00
Self-help program providing information and services.

Newton Associates Plus: $500.00
Affordable technical support including ten programming-level questions per year via e-mail.

Newton Partners: $1,500.00
Comprehensive technical support including unlimited programming-level questions via e-mail, additional development hardware purchase privileges, and eligibility for Newton platform seeding opportunities.

For more information, visit http://dev.info.apple.com.

Apple Solution Professionals Network (ASPN)

Solution Professionals NETWORK

Consultants, developers, and systems integrators need a wide range of information and tools to develop the best possible solutions for their clients. ASPN connects them to Apple sales, marketing, and product information resources, providing a direct line to the kind of information and support that's vital to remain competitive.

There are two levels of membership, which include benefits such as:

- Regular Information Mailings (Colleague and Affiliate Levels)
- A Listing in the ASPN Directory (Affiliate Level)
- Invitations to Technology Meetings (Affiliate Level)
- Trade Show Participation (Affiliate Level)
- Technical Phone Support (Affiliate Level)

To join call (800) 290-ASPN!

Apple Multimedia Program

Targeted to content developers and the creative community, the Apple Multimedia Program (AMP) offers a breadth of resources and information—both technical and marketing—to help keep developers up to date on Apple's offerings for multimedia authoring and playback. Members receive:

- Quarterly mailings
- Discounts on third-party software, hardware, training and events
- Co-marketing opportunities
- Seeding opportunities

For more information, visit http://www.amp.apple.com.

Value Added Reseller (VAR) Programs

Apple's Value Added Reseller programs are designed for VARs who wish to sell, service and support solutions that incorporate Apple products. VARs must:

- Develop custom or proprietary hardware, software, content or solutions, OR
- Provide expertise on Apple products within a target vertical market.

VARs must meet all program eligibility requirements and be authorized into one of Apple's two VAR programs—indirect or direct. Annual purchase commitments begin at $25,000 for indirect VARs and $1,000,000 for direct VARs. Solutions provided by direct VARs must be strategic to Apple, technically sophisticated and highly customized.

To apply, call (408) 996-1010.

Education Solution Provider Program

ESP. Education Solution Provider Membership Program

Apple's commitment to education begins at our roots. Our computer products—coupled with the excellent software created by third-party developers—have helped Apple capture the leading market share position in schools across the country. The Education Solution Provider (ESP) Program offers valuable benefits including:

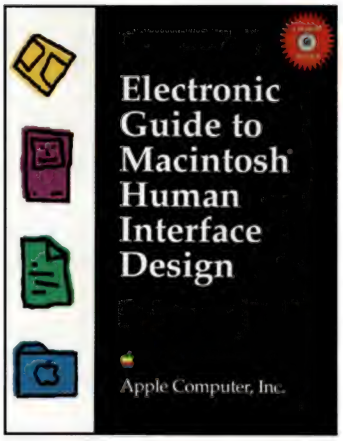
- Co-Marketing Activities
- Weekly Bulletin
- Monthly Mailbox
- Quarterly Gatherings
- Access to Apple's Salesforce

To join call (800) 469-9523.

If you are unable to visit our Web sites, call us at 408-974-4897 for more information.

Apple Computer, Inc.

Electronic Guide to Macintosh Human Interface Design



Included in DEVELOPER MAILING

The full electronic text of the award-winning classic book, *Macintosh Human Interface Guidelines* and its award-winning CD-ROM companion, *Making It Macintosh*, are on one convenient, easy-to-use CD. Hypertext links make for easy navigation between the book and the animated examples in *Making It Macintosh*.

Electronic Guide to Macintosh Human Interface Design (CD-ROM)

R0450LL/B **$49.95**

Macintosh Human Interface Guidelines (Book)

A7G0025/B **$24.95**

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 8 MB RAM; System 7 or later; CD-ROM drive; 13-inch color monitor and QuickTime.

Apple Computer, Inc.

Inside Macintosh CD-ROM

Included in DEVELOPER MAILING

Now you can have instant access to more than 16,000 pages of information contained in the complete *Inside Macintosh* suite–all in one place at your fingertips.

Good Macintosh software applications are definitive, meticulously detailed, clearly written, and logically structured. So why shouldn't Macintosh programming reference material be the same way? As a matter of fact, it is. And now it's all on one CD.

The *Inside Macintosh CD-ROM* contains the electronic text for 25 books from *Inside Macintosh*—the essential resource for Macintosh programmers, engineers and designers.

Also included on the CD is the text for *Macintosh Human Interface Guidelines*, an important companion to the *Inside Macintosh* series.

The CD features Apple DocViewer collection files which allow you to search the library and retrieve information in ways that are unique to the electronic medium—directly from your computer and conveniently from one CD.

You also get the *Inside Macintosh X-Ref*, which contains a master index, several specialized indexes, a list of result codes, and a glossary, all compiled from the twenty-five *Inside Macintosh* books.

Inside Macintosh CD-ROM is the ultimate electronic reference to the Macintosh programming series. If you're a Macintosh programmer, you shouldn't be without it.

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 1 MB RAM; System 7.0 or later; CD-ROM drive.

T1575LL/A **$89.95**

Apple Computer, Inc.

Macintosh Programmer's Toolbox Assistant CD-ROM

Included in E·T·O Included in DEVELOPER MAILING

Have you ever needed to find current information about using a crucial Macintosh toolbox call while in the middle of writing your application? Now with just a click of your mouse, you can get instant access to more than 5,000 toolbox calls that are at the heart of Macintosh system software. Macintosh Programmer's Toolbox Assistant is an invaluable CD-ROM database that will help you find key data structures, resources, constants, and functions when you need them the most.

Fast Search and retrieve the specifications of more than 5,000 toolbox calls.

Convenient Copy and paste routine templates and sample code into your application.

Easy Navigate related information with hypertext.

Features

- Contains all routines, data structures, and constants as documented in *Inside Macintosh*, including the QuickDraw GX and AOCE libraries
- Uses a modern search engine technology to provide fast search and retrieval
- Is directly accessible from most of the popular Macintosh development environments
- Connects related information with abundant hypertext links to allow for easy navigation
- Indexes routines, managers, and data structures to group the information you need in the most convenient way
- Includes routine templates and sample code that can be copied and pasted into your application's source code

Requirements

Macintosh or Mac OS-compatible computer with a 68000 or greater processor; 1 MB RAM; 20 MB hard disk space; System 7.0 or later; CD-ROM drive.

T1616LL/A **$89.95**

Apple Developer Mailing

Apple Computer, Inc.

If you want the latest technical and marketing information from Apple, this subscription is for you. Every month you'll receive a copy of Apple Directions and an edition of the Developer CD Series.

Apple Directions

Apple's monthly developer business report offers insights into Apple technologies, strategies, and priorities, as well as business information useful for developing and marketing products.

The Developer CD Series

This comprehensive information resource is composed of a series of editions, distributed in quarterly cycles. In April, developers will receive the System Software and Mac OS SDK editions, in May the Tool Chest edition, and in June the Reference Library edition.

System Software Contains Macintosh system software localized in 36 languages, providing you with the ability to develop and test localized versions of your software and to ensure compatibility with a wide range of Macintosh models and OS versions. You'll also receive pre-release versions of new system software.

Mac OS SDK Provides convenient access to the most current Macintosh operating system software development kits published by Apple.

Tool Chest Offers an assortment of development tool utilities, platform and language information, and sample code.

Reference Library Contains a complete set of technical documentation including the *Inside Macintosh* series, Macintosh Technical Notes, *develop* magazine, *The Macintosh Programmer's Toolbox Assistant*, and *Macintosh Human Interface Guidelines*—all in electronic format.

Special User Note

A Macintosh computer with a CD-ROM drive is required for the Developer CD Series.

SDKs Included for the Following System Extensions

- Apple Guide
- AOCE
- Apple Remote Access API
- Apple Remote Access Modem
- Apple Shared Library Manager
- AppleScript
- AppleSearch
- AppleShare API
- AppleTalk Wide Area
- ColorSync
- Communications Toolbox
- Control Strip
- Designing PCI Cards & Drivers
- Drag and Drop
- File System Manager
- Installer
- Macintosh Easy Open
- MacODBC
- MacSNMP
- MacTCP
- MacX25
- Network Software Installer
- Open Transport
- PlainTalk
- QuickDraw GX
- QuickTime
- Sound Manager
- Telephone Manager
- Thread Manager
- XTND

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Developers interested in Newton Platform technologies will find a dedicated Newton Monthly Mailing on page 42.

Multimedia developers can read about the Apple Multimedia Information Mailing on page 10.

Apple Developer Mailing (12 mailings)

C0197LL/A **$149.00**

One-Year Renewal Subscription (12 mailings)

R0161LL/A **$149.00**

This product may contain Class 1b beta release products and Class 2 restricted products. Beta releases of products are not fully tested and documented, but are expected to be completed in the future. Class 2 products are not tested, and documentation may still be in preliminary draft form.

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The developer business report on Apple's strategic, business and technical directions. Call now to subscribe, and receive 12 monthly issues.

R0570LL/A

$49.00

Mac™OS

SDK Edition of the Developer CD Series

The software previously included with the Mac OS SDK product will now be part of a special SDK Edition of the Developer CD Series. These Software Developer's Kits represent a comprehensive, up-to-date collection of powerful technologies that will assist you in developing the world-class applications of the future.

Apple provides over 30 individual SDKs. A typical SDK for a Macintosh system software extension provides the following basic components you will need to learn in order to add support for a system extension in your software:

- System software extensions
- Programming interfaces and libraries
- Sample code
- Electronic technical documentation (supplemental to *Inside Macintosh*)

Customers who have current subscriptions to the Mac OS SDK will now receive the complete Apple Developer Mailing subscription for no additional charge.

Special User Note

Because of licensing restrictions, special distribution requirements, or changes in distribution strategies, certain SDKs may not be included from time-to-time. The list of software components included in Mac OS Software Developer's Kit is subject to change without notice.

Requirements

A CD-ROM drive is required for installation; in general, the software requires the use of Apple's latest version of the Mac OS (currently System 7.5), although each individual SDK has its own specific requirements; most sample code is designed for use with MPW Pro.

FOR INFORMATION ON

MACINTOSH DEVELOPER PROGRAMS

which include the Apple Developer Mailing

SEE PAGE 46

Apple Computer, Inc.

develop, The Apple Technical Journal

develop, Apple's award-winning quarterly technical journal, contains full-length articles, columns, and Q&As that will help reduce your development time and enhance your programming savvy.

Each issue comes with the latest *develop Bookmark* CD, which contains the source code for that issue of *develop*, plus all back issues of *develop*, Macintosh Technical Notes, sample code, and other software and documentation.

Special User Note: *A Macintosh computer with a CD-ROM drive is required for the Bookmark CD.*

***develop* (4 issues and 4 CDs)**

M0929LL/B **$27.00**

***develop* (Renewal; 4 issues and 4 CDs)**

R0658LL/A **$27.00**

Individual back issues of *develop* are also available. Recent back issues include:

Issue 24: Speeding Up **whose** Clause Resolution; OpenDoc Storage; Sound; Alert Guidelines; Printing Images Faster With Data Compression

030-861324 **$10.00**

Issue 23: QuickTime Music Architecture; QuickDraw 3D Geometries; Internet Config; Multipane Dialogs; Document Synchronization; ColorSync 2.0

030-861323 **$10.00**

Issue 22: QuickDraw 3D; Copland; PCI Device Drivers; Custom Color Search Procedures; The OpenDoc User Experience; Futures

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develop
Speeding Up whose Clause Resolution in Your Scriptable Application
Getting Started With OpenDoc Storage
Sound Secrets
Guidelines for Effective Alerts
Printing Images Faster With Data Compression
The New Device Drivers: Memory Matters
develop
Bookmark CD

New Books on Basic and Breakthrough

The Latest Inside Macintosh Books Keep You up to Speed

Addison-Wesley Publishing Company

Operating System

Inside Macintosh: Files

Details how your application can handle the commands typically found in a file menu.

R0356LL/A **$29.95**

Inside Macintosh: Memory

Provides detailed strategies for allocating and releasing memory, avoiding low-memory situations, and preventing the use of invalid handles and pointers.

R0357LL/A **$24.95**

Inside Macintosh: Operating System Utilities

Learn how to manage various low-level aspects of the Macintosh Operating System and how to handle issues that are not specifically related to files, memory, or process execution.

T1553LL/A **$28.95**

Inside Macintosh: Processes

A detailed look at the parts of the Macintosh operating system that allow you to control the execution of processes and interrupt tasks.

R0355LL/A **$22.95**

QuickDraw GX

Inside Macintosh: QuickDraw GX Graphics

Shows you how to create and manipulate the fundamental geometric shapes of QuickDraw GX to generate a vast range of graphics entities.

T1113LL/A **$31.95**

Inside Macintosh: QuickDraw GX Objects

A must read before tackling any other books in the QuickDraw GX suite—starts with an overall introduction to QuickDraw GX, and then describes how you can create and draw graphical and text elements using fundamental objects.

T1430LL/A **$31.95**

Inside Macintosh: QuickDraw GX Printing Extensions and Drivers

Discover how you can quickly build printer drivers for existing and new output devices, resulting in Macintosh support for an even greater range of output devices.

T1114LL/A **$29.95**

Inside Macintosh: QuickDraw GX Environment and Utilities

A complete reference to the essential supporting components of QuickDraw GX that describes important features of the QuickDraw GX programming environment.

T1555LL/A **$31.95**

Inside Macintosh: QuickDraw GX Typography

A comprehensive overview of typographic concepts complete with numerous examples and reference material for the data structures and functions you can use to create text with QuickDraw GX.

T1550LL/A **$29.95**

Inside Macintosh: QuickDraw GX Printing

A detailed look at how to implement printing in the QuickDraw GX environment as well as how to support printing-related dialog boxes and events, implement a print loop, customize printing features, and more.

T1551LL/A **$28.95**

Inside Macintosh: QuickDraw GX Programmer's Overview

Gets you started programming with QuickDraw GX by revealing the universe of QuickDraw GX object architecture, graphics, typography, printing features, runtime, and debugging environments.

T1554LL/A **$24.95**

Related Product

QuickDraw GX Font Formats and The TrueType Font Format Specification

R0601LL/A **$50.00**

SEE PAGE 47
ALL *INSIDE MACINTOSH* BOOKS
NOW AVAILABLE ON CD!

PowerPC

Inside Macintosh: PowerPC Numerics

Covers the floating-point numerics environment provided with the first release of the PowerPC processor and describes the IEEE standard 754 for binary floating-point arithmetic and how PowerPC numerics comply with it.

T1111LL/A **$28.95**

Inside Macintosh: PowerPC System Software

Learn about the new process-execution environment and system software services provided with the first release of Power Macintosh computers.

T1112LL/A **$24.95**

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Technologies

INSIDE MACINTOSH: AOCE Application Interfaces
INSIDE MACINTOSH: AOCE Service Access Modules
INSIDE MACINTOSH: More Macintosh Toolbox
INSIDE MACINTOSH: Sound
Imaging With QuickDraw

Visual Environment

Inside Macintosh: Macintosh Toolbox Essentials

The essentials of how to implement user interface components in Macintosh applications, such as menus, windows, scroll bars, and dialog boxes.

R0360LL/A **$34.95**

Inside Macintosh: More Macintosh Toolbox

The ideal companion to *Inside Macintosh: Macintosh Toolbox Essentials*.

T0627LL/A **$34.95**

Inside Macintosh: Overview

Focuses on Macintosh "look and feel," human interface principles, the desktop metaphor, the event loop, resources, collaborative computing, and programming languages and tools.

R0359LL/A **$24.95**

AOCE

Inside Macintosh: AOCE Application Interfaces

Learn about the application interfaces to the Apple Open Collaboration Environment and how to add electronic mail capabilities to applications, write messaging applications, store and retrieve information from PowerShare and other AOCE catalogs.

T1535LL/A **$44.95**

Inside Macintosh: AOCE Service Access Modules

The book to read if you want to extend the capabilities of the PowerTalk—learn how to add catalog and messaging services to those available through PowerTalk system software and PowerShare collaboration servers.

T1534LL/A **$29.95**

Multimedia

Inside Macintosh: QuickTime

An essential reference that will get you started integrating video, animation, and sounds into your applications.

T0563LL/A **$29.95**

Inside Macintosh: QuickTime Components

Read this if you're developing an application that uses QuickTime components, or if you're developing a component that will be used by QuickTime applications.

T0593LL/A **$34.95**

Inside Macintosh: Sound

Explains the parts of the Macintosh system software that let you manage sounds—in particular, the Sound Manager, the Sound Input Manager, and the Speech Manager.

T1533LL/A **$29.95**

Other *Inside Macintosh* Books

Inside Macintosh: Devices

An essential reference for writing a Macintosh device driver or desk accessory.

T1552LL/A **$29.95**

Inside Macintosh: Imaging with QuickDraw

Get conversant with QuickDraw, the part of the Macintosh Toolbox that performs graphics operations, and the Printing Manager, which allows applications to print the images created with QuickDraw.

T1109LL/A **$32.95**

Inside Macintosh: Interapplication Communication

Learn how to make your application work with other applications to give users even greater power and flexibility.

T0594LL/A **$36.95**

Inside Macintosh: Networking

Covers key concepts of networking the Macintosh with other computers and describes in detail the components and organization of AppleTalk networking protocols.

T1110LL/A **$29.95**

Inside Macintosh: Text

Learn how applications perform text handling, from simple character display to multilanguage text processing.

T0564LL/A **$39.95**

Inside Macintosh: X-Ref

Provides a quick and easy way to find the exact information you need in the *Inside Macintosh* series, the essential resource for Macintosh programmers, engineers, and designers.

T1659LL/A **$19.95**

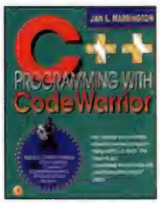
AP PROFESSIONAL

C++ Programming with CodeWarrior: Beginning OOP for the Macintosh and Power Macintosh

Jan L. Harrington

1995

400 pages with CD-ROM



This book teaches programming novices object-oriented programming techniques for the Macintosh and the Power Macintosh, using C++ as the example language and Metrowerks CodeWarrior as the example compiler.

Features

- Designed for programming novices who want to learn object-oriented programming from the ground up
- Gives examples specific to Metrowerks CodeWarrior
- Includes intorduction to key concepts of object-oriented programming, such as classes and inheritance
- Comes with working version of CodeWarrior C++ compiler to execute sample programs and complete programming challenges presented in the book

Note

CD-ROM also includes source code for easy implementation

T1924Z/A **$34.95**

WebMaster Macintosh

Bob LeVitus and Jeff Evans

Learn how to turn your Macintosh into a World Wide Web server and create professional quality Web pages. This new book is packaged with a CD-ROM containing all the software necessary to make this happen.

T1777Z/A **$29.95**

Programming Primer for the Macintosh, Volume 1

John May and Judy Whittle

1994

352 pages with disk

Provides an introduction to Macintosh programming, using C++ as the example language. This book uses realistic, easy-to-follow programming examples designed to work with either Symantec C++ or Metrowerks CodeWarrior. Features in-depth coverage of Macintosh C++ programming style, memory management, object-oriented programming techniques, debugging and Finder resources, and Macintosh Toolbox and Toolbox managers like the Alert Manager, the Dialog Manager, and QuickDraw.

Features

- Provides a stepwise introduction to new topics, numerous practical examples, and a creative balance of text, source code, and graphics
- Includes floppy disk with source code for programming examples that will compile with both Symantec C++ and Metrowerks CodeWarrior, plus public domain utilities to use with each compiler

T1925Z/A **$37.95**

Addison-Wesley

Planning and Managing Web Sites on the Macintosh: The Complete Guide to WebSTAR and MacHTTP

Jon Wiederspan and Chuck Shotton

1995

384 pages with CD-ROM

This book is a definitive guide to setting up and running a Web site on the Macintosh, written by two acknowledged experts in the field. It skillfully teaches you everything you need to know about using WebSTAR, the best known MacHTTP server software, and its shareware predecessor MacHTTP, as well as programming guides for writing CGI applications for your server. A special version of WebSTAR, plus tons of useful software, are on the CD-ROM.

Jon Wiederspan is the Director of Technical Services at ComVista Internet Solutions, Inc.

Chuck Shotton is the author of MacHTTP and WebSTAR. He is a senior vice president of engineering at StarNine, where he oversees development of WebSTAR and other Internet software.

T1831Z/A **$39.95**

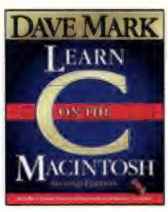
Addison-Wesley

Learn C on the Macintosh, Second Edition

Dave Mark

1995

496 pages with CD-ROM



Anyone who can use a Macintosh can learn C, and all the information needed to do it is right here! *Learn C on the Macintosh, Second Edition,* has been revised and updated to include fresh code, enhanced lessons, and a CD-ROM with sample code and CodeWarrior Lite, a special version of the development environment from Metrowerks.

Dave Mark is one of the world's leading teachers and best-known authorities on Macintosh programming. He is a columnist for *MacTech* magazine, and his company, SpiderWorks, specializes in custom Macintosh development. He is the author of several bestselling Macintosh programming books including *Learn C++ on the Macintosh* and the *Macintosh Programming Primer* series.

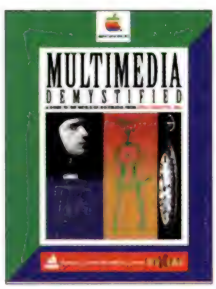
T1886Z/A **$34.95**

Random House Electronic Publishing

Multimedia Demystified, A Guide to the World of Multimedia from Apple Computer, Inc.

Apple Computer, Inc.

1994



A comprehensive look at the markets, media, and organizations that make up the multimedia industry. Much of the material is based on interviews with multimedia developers who have successfully moved from an initial spark to a completed product.

T1115LL/B **$29.00**

Note

Included with subscription to Apple Multimedia Information Mailing.

Orders are shipped within 24 hours. **Order Toll-free Monday through Friday, 7am-5pm, PST.** U.S.: **1-800-282-2732**

Addison-Wesley Publishing Company

Essential OpenDoc

Jesse Feiler and Anthony Meadow

Developed by Apple, IBM, and Novell, OpenDoc enables the development of a new class of applications for Windows, Macintosh, OS/2, UNIX, and other personal computer platforms. It is supported by CI Labs, a unique industry-wide consortium of hardware and software developers. *Essential OpenDoc* introduces basic OpenDoc concepts and explains the implications of this exciting software architecture for developers, consultants, system integrators, and solution providers.

This book provides an in-depth look at the technical issues of OpenDoc and explores the three core technologies that support its functionality, including The System Object Model (SOM), OpenDoc's storage mechanism, and The Open Scripting Architecture.

Essential OpenDoc also examines Cyberdog, a set of OpenDoc part editors that provides access to Internet services and offers a compelling example of the power of OpenDoc development.

T1927Z/A **$24.95**

Addison-Wesley Publishing Company

OpenDoc Programmer's Guide

Apple Computer, Inc.

The *OpenDoc Programmer's Guide* shows how to develop for OpenDoc on the Mac OS platform, using three different sections.

Section 1 explains what parts and part editors are, how embedding works, and how you should approach your development project.

Section 2 describes OpenDoc programming in detail. It includes chapters on embedding, drawing, menus, windows, storage, data transfer, scripting, and extending OpenDoc.

Section 3 provides guidelines for presenting the correct interface to your users.

The *OpenDoc Programmer's Guide* also includes an extensive glossary of OpenDoc terms and appendixes with checklists to speed your programming efforts.

The included CD-ROM contains the OpenDoc Class Reference, the complete reference to the OpenDoc programming interface, and extensive sample code and programming "recipes" from the OpenDoc development team.

T1861Z/A **$44.95**

Addison-Wesley Publishing Company

OpenDoc Cookbook

Apple Computer, Inc.

This companion book to the *OpenDoc Programmer's Guide* shows how to create OpenDoc software components, called part editors, for the Mac OS platform. The *OpenDoc Cookbook* contains source code for a complete but basic part editor implemented by the OpenDoc engineering team at Apple Computer to illustrate the correct way to code to the OpenDoc programming interface. The source code is accompanied by step-by-step explanations.

Features

- Instructions for setting up the MPW development environment to write OpenDoc software
- Annotated listings explaining the methods that implement the SamplePart part editor
- Descriptions of other sample part editors created by the OpenDoc engineering team to illustrate more advanced features
- An introduction to the System Object Model (SOM) technology underlying OpenDoc

Note

Source code files for the SamplePart part editor and other example part editors are included on the CD-ROM the comes with the OpenDoc Programmer's Guide.

T1926Z/A **$24.95**

Additional Books

Multimedia

Computer Graphics: Principles and Practice, Second Edition

Addison-Wesley Publishing Company
James D. Foley, 1995; 1112 pages

Comprehensive, authoritative, and up-to-date, this is the standard computer graphics reference work for the 1990s.

T1887Z/A $68.95

Desktop Video Studio

Random House Electronic Publishing
Andrew Soderberg and Tom Hudson, 1995

Book and CD-ROM provide essential background information on creation and processing of digital video with a primer section, tips and techniques, and case studies.

T1736Z/A $45.00

How to Digitize Video

John Wiley & Sons, Inc.

Book and CD-ROM guide you through hardware and software selection, video capture and conversion, storage, editing, and playback.

T1662LL/A $39.95

Multimedia Demystified, A Guide to the World of Multimedia from Apple Computer, Inc.

Random House Electronic Publishing
Apple Computer, Inc., 1995

See ad on page 52. This book is included with subscription to Apple Multimedia Information Mailing on page 10.

T1115LL/B $29.00

QuickTime: The Official Guide for Macintosh Users

Hayden Books
Judith L. Stern and Robert A. Lettieri, 1994; 343 pages

Book and CD-ROM enable you to create, edit, and play QuickTime movies on your Macintosh. Get started with basics then move to advanced tasks.

T1678LL/A $45.00

Sex, Lies, and Video Games: How to Write a Macintosh Arcade Game

Addison-Wesley Publishing Company
Bill Hensler

Exposes you to the techniques of producing games on the Macintosh—games with captivating animation and sounds. No previous game programming experience necessary, just the ability to write a program with standard interface elements.

T1835Z/A $34.95

3-D Starter Kit for Macintosh

Hayden Books
Sean Wagstaff, 1994; 486 pages

The complete reference to 3-D graphics on the Macintosh—ideal for beginning to intermediate illustrators, graphic designers, multimedia developers, and animators.

T1892Z/A $40.00

Tricks of the Mac Game Programming Gurus

Hayden Books
Jamie McCornack, 1995. 900 pages

Comprehensive Mac game programming sourcebook to turn to for information.

T1890Z/A $50.00

Languages and Environments

Algorithms, Second Edition

Addison-Wesley Publishing Company
Robert Sedgewick, 1988

A survey of important algorithms and data structures, including arithmetic and numerical methods.

T0175LL/B $44.25

C++ Programming Language, The Second Edition

Addison-Wesley Publishing Company

Bjarne Stoustrup, 1991, AT&T Bell Laboratories

This definitive guide, written by the designer of C++, covers all the features in the most recent release.

T0191LL/B $34.50

Essential OpenDoc

Addison-Wesley Publishing Company

Jesse Feiler and Anthony Meadow

Introduces basic OpenDoc concepts and explains the implications of this exciting software architecture for developers. See ad on page 53.

T1927Z/A $24.95

Foundations of Mac Programming

IDG Books

Dan Parks Sydow, 1995, 708 pages

Covers the basics, from resources to QuickTime movies. Includes CD-ROM with code for Symantec C++ 8.0 and Metrowerks CodeWarrior.

T1899Z/A $39.95

How to Write Macintosh Software, Third Edition

Addison-Wesley Publishing Company

Scott Knaster and Keith Rollin, 1992

An excellent source for key Macintosh programming issues like memory management and debugging techniques.

T0150LL/B $28.95

Inside CodeWarrior 8

Metrowerks Inc.

Provides in-depth information about the CodeWarrior development environment. See ad on page 15.

T1648LL/C $34.95

Learn C on the Macintosh

Addison-Wesley Publishing Company

Dave Mark, 1995

See ad on page 52.

T1886Z/A $34.95

Learn C++ on the Macintosh

Addison-Wesley

Dave Mark, 1993

Self-paced book/disk package with comprehensive tutorial in programming fundamentals and C++ language basics.

T0823LL/A $36.95

Macintosh C Programming Primer, Volume I, Inside the Toolbox Using THINK C, 2nd Edition

Addison-Wesley Publishing Company

Dave Mark and Cartwright Reed, 1992

Covers event-driven programming, windows manipulation, menus, dialog boxes, file management, and more.

T0256LL/B $26.95

Macintosh C Programming Primer, Volume II, Mastering the Toolbox Using THINK C, 2nd Edition

Addison-Wesley Publishing Company

Dave Mark, 1990

Covers advanced useage of Symantec's THINK C compiler by creating a series of applications focused on the Macintosh Toolbox.

T0402LL/A $24.95

Macintosh Programming Secrets, Second Edition

Addison-Wesley Publishing Company

Scott Knaster, 1992

Dozens of hints, tips, and insights on how to take full advantage of tools available in Macintosh system software.

T0157LL/B $29.95

Mastering the THINK Class Library

Addison-Wesley Publishing Company

Richard O. Parker, 496 pages

Provides a thorough examination of Symantec's extensive Class Library and the Visual Architect interface development tool. Includes complete description of TCL, explanations of all code generated by the Visual Architect, and tutorials to simplify Mac application development.

T1730Z/A $29.95

Metrowerks CodeWarrior Programming

Henry Holt & Company

Dan Parks Sydow

The authorized guide to CodeWarrior, giving you complete coverage of the Gold edition of this exciting compiler. You'll be able to rapidly develop applications for the 68K and Power Macintosh computers with the techniques you learn from this book. Companion CD-ROM includes CodeWarrior Lite—a limited version of CodeWarrior.

T1735Z/A $39.95

More Mac Programming Techniques

Henry Holt & Company

Dan Parks Sydow

Go beyond the fundamentals of Macintosh programming with this hands-on guide and tutorial. Expand on the basic foundation of programming to create powerful applications, learning solid techniques you can apply anywhere.

T1715Z/A $34.95

OpenDoc Cookbook

Addison-Wesley Publishing Company

This companion book to the *OpenDoc Programmer's Guide* shows how to create OpenDoc software components. See ad on page 53.

T1926Z/A $24.95

OpenDoc Programmer's Guide for the Mac OS

Addison-Wesley Publishing Company, 1995

See ad on page 53.

T1861Z/A $44.95

Optimizing PowerPC Code

Addison-Wesley Publishing Company

Gary Kacmarcik, 704 pages

To take full advantage of the speed and features of the PowerPC chip, you need to master assembly language techniques. Written by an expert, this book provides hard-core, cross-platform help at the assembly language level.

T1731Z/A $39.95

Power Macintosh Programming Starter Kit

Hayden Books

Tom Thompson

This book and CD-ROM combo takes you on a tour of the entire Power Macintosh environment.

T1864Z/A $39.95

Programming QuickDraw

Addison-Wesley Publishing Company

David A. Surovell, Fred M. Hall, and Konstantin Othmer, 1993

Describes how to develop software using QuickDraw and the rest of the graphics managers in the Macintosh Toolbox. Illustrated and accompanied by functional source code examples.

T0603LL/A $26.95

Programming Starter Kit for Macintosh

Hayden Books

Jim Trudeau, 1995, 600 pages

This all-in-one kit contains everything you need to get started with the world of Macintosh programming! See ad on page 45.

T1742Z/A $45.00

Programming the PowerPC: Programming Native Applications for the New Power Macintosh

Henry Holt & Company

Dan Parks Sydow

Complete introduction to the world of RISC computing. Learn how to program effectively for the 68LC040 emulator.

T1867Z/A $39.95

Symantec C++ Programming for the Macintosh

Prentice Hall Computer Publishing

Neil Rhodes and Julie McKeeban, 1992

Learn C++ programming for the Macintosh with this practical, hands-on guide and sample code disk.

T0606LL/A $39.95

THINK Reference 2.0

Symantec Corporation

Indispensable reference with electronic versions of the six original Inside Macintosh volumes.

T0467LL/B $89.00

3D Graphics Programming with QuickDraw 3D

T1724Z/A $39.95

Internet

How to Set Up and Maintain a World Wide Web Site: The Guide for Information Providers

Addison-Wesley Publishing Company

Lincoln D. Stein, 1995, 352 pgs.

Covers all the essentials of designing, configuring, maintaining, and expanding a Web site using the most popular software packages.

T1885Z/A $29.00

Internet Starter Kit for Macintosh, Third Edition

Hayden Books

Adam C. Engst, 1995, 900 pages

Your ticket to the world of the Internet, this book provides all the information and software you need to get on the Net.

T1891Z/A $35.00

Orders are shipped within 24 hours. **Order Toll-free Monday through Friday, 7am-5pm, PST.** U.S.: **1-800-282-2732**

Planning and Managing Web Sites on the Macintosh: The Complete Guide to WebSTAR and MacHTTP

Addison-Wesley Publishing Company
Jon Wiederspan and Chuck Shotton

See ad on page 52.

T1831Z/A $39.95

Publishing on the World Wide Web for Macintosh

Hayden Books
Greg Holden, 1995; 450 pages

Reference tool for all people and businesses that want to learn about publishing on the World Wide Web.

T1889Z/A $30.00

Webmaster Macintosh

AP Professional
Bob LeVitus and Jeff Evans

See ad on page 52.

T1777Z/A $29.95

Solutions

Apple Event Registry: Standard Suites

Apple Computer, Inc.

R0130LL/A $85.00

Apple Guide Complete

Addison-Wesley Publishing Company

Everything you need to successfully produce guide files, including Guide Maker, is in this book and CD-ROM package.

T1650LL/A $39.95

Applied Mac Scripting

Henry Holt & Company
Tom Trinko

Learn to use AppleScript and Frontier scripting environments with this hands on tutorial. Presents an overall approach to designing and developing powerful scripts, with valuable new techniques for Macintosh automation.

T1713Z/A $34.95

AppWare Programming Primer

Addison-Wesley Publishing Company
Eric Weidl; 352 pages

Provides the ideal introduction to Novell's AppWare programming environment (see page 26). Included PC disk has preassembled applications that can be linked together without coding.

T1728Z/A $34.95

Complete Handbook for HyperCard 2.2, The, Fourth Edition

Random House Electronic Publishing
Danny Goodman; 1993; 1,184 pages

Shows how to build working applications using the latest edition of HyperCard (see page 27). Covers text, painting tools, extension commands (XCMDs), scripting in HyperTalk, and more. This is the biggest-selling Macintosh book.

T1090LL/A $35.00

Danny Goodman's Apple Guide Starter Kit

Addison-Wesley Publishing Company
Danny Goodman and Jeremy Joan Hewes; 320 pages

Make guides quickly and easily, without learning a scripting language, using advice and tips on how to design a good guide.

T1727Z/A $34.95

Danny Goodman's AppleScript Handbook, Second Edition

Random House Electronic Publishing
Danny Goodman; 576 pages

Shows how to integrate functions, automate processes in Finder and third-party applications, and more. Comes with hundreds of dollars of software on the included disk; this package is complete and requires no programming experience.

T1733Z/A $40.00

HyperTalk 2.2: The Book, Second Edition

Random House Electronic Publishing
Danny Goodman, Dan Winkler, Scot Kamins, Jeanne Devoto, 1993

The most complete, authoritative source on HyperTalk 2.2 programming and troubleshooting, covers each language element—including quirks and bugs.

T1089LL/A $35.00

Real World Apple Guide

Henry Holt & Company
Jesse Feiler

Learn how to develop assistance, use it effectively, incorporate it into applications, combine it with existing applications, and provide custom solutions. Book and CD package provides tutorials and examples to write and compile Apple Guide files.

T1714Z/A $39.95

Newton

Programming for the Newton

AP Professional
Julie McKeeban and Neil Rhodes

An indispensable tool for Newton programmers; learn how to develop software for the Newton, including key concepts of object-oriented programming to facilitate use of NewtonScript. Included disk has sample code for examples and a demonstration version of Newton Toolkit.

T1434LL/A $29.95

Wireless for the Newton

AP Professional /Harcourt Brace
Julie McKeeban and Neil Rhodes

Picks up where Programming for the Newton left off, with more detailed instruction on creating Newton software.

T1778Z/A $34.95

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A Fragment of Your Imagination

Practical help for creating code resources and code fragments for the Macintosh and Power Macintosh, with thorough explanations about how the Macintosh system functions as a whole.

T1725Z/A $39.95

Advanced Color Imaging on the Mac OS

The official reference to the Color Picker, the Color Sync Manager, the Palette Manager, and the Color Manager. Includes conceptual information and code samples on CD-ROM, with step-by-step instructions for extending your color capabilities.

T1726Z/A $36.95

Apple CD-ROM Handbook—A Guide to Planning, Creating, and Producing a CD-ROM

Addison-Wesley Publishing Company
Apple Computer, Inc., 1992

Takes you step-by-step through the process of producing a CD-ROM, addressing planning, production, legal, and financial considerations.

R0422LL/A $14.95

Apple Publications Style Guide

Apple Computer, Inc.

Includes extensive alphabetical listing of rules, style, and usage for terms found in Apple manuals.

A7G0030/F $30.00

AppleTalk Update-Based Routing Protocol (AURP) Technical Specifications

Apple Computer, Inc.

Specifications that give detailed information about AURP and wide-area networking.

R0463LL/A $25.00

Breaking Through, A Technical Guide for the Design and Development of CD-ROMs

Apple Computer, Inc., 1994

Technical companion to the Apple CD-ROM Handbook that looks at the stages of CD-ROM production, including necessary hardware, software, and procedures. Included with subscription to Apple Multimedia Information Mailing (see page 10).

T1116LL/A $14.95

Guide to Macintosh Software Localization

Addison-Wesley Publishing Company
Apple Computer, Inc., 1992

Full of practical information that provides an overview of localization issues such as language, graphics, and documentation.

M1528LL/B $24.95

Inside AppleTalk, Second Edition

Addison-Wesley Publishing Company
Apple Computer, Inc., 1989, 1990

Shows how to create applications that work with the AppleTalk Network System.

C0078LL/B $34.95

Inside the Macintosh Communications Toolbox

T1747Z/A $26.95

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Apple Computer, Inc.

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R0250LL/A $20.00

Planning and Managing AppleTalk Networks

Addison-Wesley Publishing Company
Apple Computer, Inc., 1991

Comprehensive guide with illustrations detailing the planning, managing, and troubleshooting of AppleTalk Networks.

T0471LL/A $18.95

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Apple Computer, Inc.

R0601LL/A $50.00

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Apple Computer, Inc.

Six-book suite provides detailed set of guidelines for building client/server information systems.

B2020LL/A $200.00

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Designing Cards and Drivers for the Macintosh Family, Third Edition

Addison-Wesley Publishing Company

Apple Computer, Inc., 1992

M7075/C $29.95

Designing PCI Cards and Drivers for Power Macintosh Computers

R0650LL/A $35.00

Guide to the Macintosh Family Hardware, Second Edition (Macintosh Plus through Macintosh IIfx)

Addison-Wesley Publishing Company

Apple Computer, Inc., 1990

M7074/B $26.95

Macintosh Technology in the Common Hardware Reference Platform

Morgan Kaufman Publishers

Apple Computer, Inc.

Explains many of the basic design principles that have contributed to Macintosh performance and ease of use.

T1894Z/A $39.95

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Addison-Wesley Publishing Company

Mindshare, Inc.,Tom Shanley and Don Anderson; 592 pages

Describes revision 2.1 of the Peripheral Component Interconnect (PCI) bus specification. Explores PCI's relationship to the rest of the system. Includes in-depth treatment of PCI to PCI bridges, the PCI BIOS, the 66MHz PCI bus, and more.

T1716Z/A $34.95

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The official technical description of the PowerPC architecture and its hardware conventions. An essential reference for hardware and system software designers and applications programmers, and a must for anyone who needs to understand the levels of compatibility between different processors in the PowerPC family.

T1776Z/A $59.95

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T1893Z/A $39.95

PowerPC System Architecture

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Mindshare, Inc., Tom Shanley; 656 pages

Describes the hardware architecture of PowerPC systems, providing a clear, concise explanation of the PowerPC specification. Covers both 32- and 64-bit implementations.

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M7077/B $26.95

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Macintosh IIsi, LC, and Classic Developer Notes
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Macintosh Classic II, PowerBook Family, and Quadra Family Developer Notes
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R0451LL/A $25.00

Macintosh Developer Note #2: Macintosh Duo System
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Macintosh Developer Note #6: Macintosh PowerBook Duo 250 and 270c; LC 475; and Quadra 605, 610, and 650
R0550LL/A $35.00

Macintosh Developer Note #7: Macintosh LC 575
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Macintosh Developer Note #8: Power Macintosh 6100/60, 6100/60AV, 7100/66, 7100/66AV, 8100/80, and 8100/80AV
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Macintosh Developer Note #9: PowerBook 520, 520c, 540 and 540c; PowerBook Duo 280 and 280c; and PowerBook Duo Dock II
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Macintosh Developer Note #10: Macintosh LC 630, Macintosh Quadra 630, and PowerBook 150
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Apple References, including Developer Notes, can be found at:

http://dev.info.apple.com/reference.html

Macintosh Developer Note #11: Enhanced Power Macintosh Computers, Macintosh 630 DOS Compatible Computer, and DOS Compatibility Card (for Power Macintosh 6100)
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Macintosh Developer Note #12: Power Macintosh 5200, 6200, and 9500
R0651LL/A $25.00

Macintosh Developer Note #13: Power Macintosh 7200 and 7500
R0677LL/A $25.00

Macintosh Developer Note #14: Macintosh PowerBook 190 and 5300, Macintosh PowerBook Duo 2300, Macintosh PowerBook Processor Card Update Kit
R0681LL/A $25.00

Macintosh Developer Note #15: Power Macintosh 5260 and 5400 Computers and Improved Power Macintosh Models Introduced in April 1996
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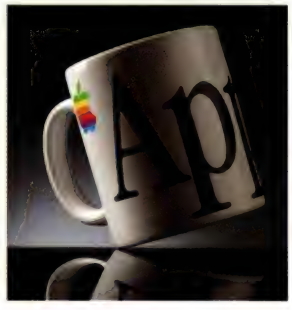

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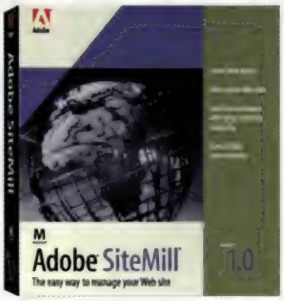

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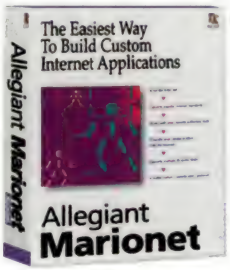

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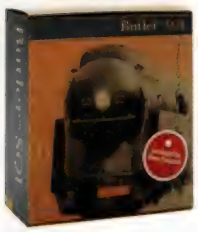

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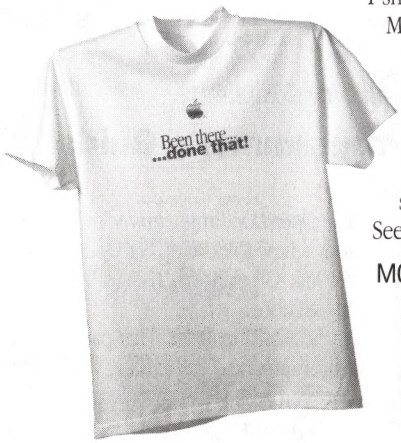

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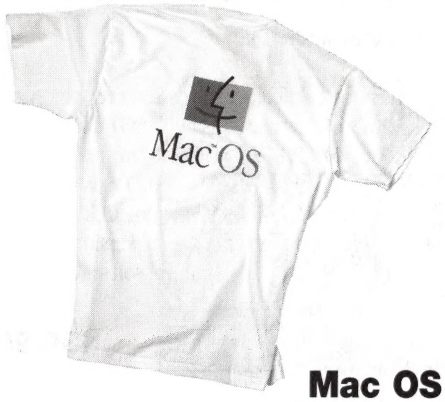

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We stand behind our products–and our customers–and are always interested in suggestions on how we might serve you better. Please feel free to contact us on AppleLink with your ideas at: TELL.ADC, or via the Internet at TELL.ADC@applelink.apple.com.

Hot Developer Books!

Addison-Wesley Publishing Company

Planning and Managing Web Sites on the Macintosh: The Complete Guide to WebSTAR and MacHTTP

Jon Wiederspan and Chuck Shotton

384 pages with CD-ROM

This book skillfully teaches you everything you need to know about using WebSTAR, the best known MacHTTP server software, and its shareware predecessor MacHTTP, as well as programming guides for writing CGI applications for your server. A special version of WebSTAR, plus tons of useful software, are on the CD-ROM. See page 52.

T1831Z/A **$39.95**

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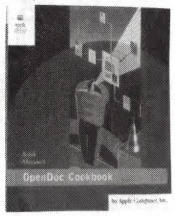
OpenDoc Cookbook

Apple Computer, Inc.



This companion book to the *OpenDoc Programmer's Guide* shows how to create OpenDoc software components, called part editors, for the Mac OS platform. It contains source code for a complete but basic part editor implemented by the OpenDoc engineering team at Apple Computer to illustrate the correct way to code to the OpenDoc programming interface. The source code is accompanied by step-by-step explanations. See page 53.

T1926Z/A **$24.95**

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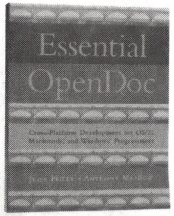

Essential OpenDoc

Jesse Feiler and Anthony Meadow

This book provides an in-depth look at the technical issues of OpenDoc and explores the three core technologies that support its functionality, including The System Object Model (SOM), OpenDoc's storage mechanism, and The Open Scripting Architecture. See page 53.

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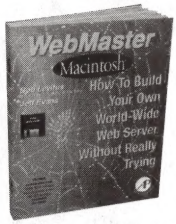
WebMaster Macintosh

Bob LeVitus and Jeff Evans



Learn how to turn your Macintosh into a World Wide Web server and create professional quality Web pages. This new book is packaged with a CD-ROM containing all the software necessary to make this happen. See page 52.

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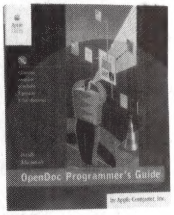
OpenDoc Programmer's Guide

Apple Computer, Inc.



The *OpenDoc Programmer's Guide* shows how to develop for OpenDoc on the Mac OS platform, using three different sections.

Section 1 explains what parts and part editors are, how embedding works, and how you should approach your development project.

Section 2 describes OpenDoc programming in detail. It includes chapters on embedding, drawing, menus, windows, storage, data transfer, scripting, and extending OpenDoc.

Section 3 provides guidelines for presenting the correct interface to your users.

The *OpenDoc Programmer's Guide* also includes an extensive glossary of OpenDoc terms and appendixes with checklists to speed your programming efforts.

The included CD-ROM contains the OpenDoc Class Reference, the complete reference to the OpenDoc programming interface, and extensive sample code and programming "recipes" from the OpenDoc development team. See page 53.

T1861Z/A **$44.95**

Apple Order Form

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*Sales and Use tax: Apple is required by law to collect applicable sales/use tax on all purchases. For products being shipped to AZ and KY, apply sales tax to the order total. All other states apply sales tax to the Subtotal, which includes freight and handling.

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❑ $3.00 APO/FPO – U.S. Mail

Shipping to destinations outside the U.S.

We will add a shipping charge to your order based on weight and destination. You may call 1-716-871-6555, or contact us via one of the ordering methods listed above, for the total cost of your order including shipping charges.